# Appendix Vol I.17 Freehold 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

# Freehold Township

#### CRS Class



# **NFIP Statistics**

117 Polices In-force

53 Total Losses

\$482,291 Total Payments

**Number of RL Properties** 

Number Mitigated RL Properties

4 RL - Total Losses

\$13,999 RL - Total Paid

Number of SRL Properties

**Number Mitigated SRL Properties** 

SRL - Total Losses

SRL - Total Paid

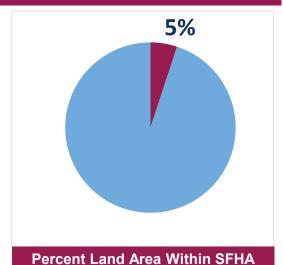
# **Critical Facilities**



**84** Critical Facilities

Critical Infrastructure

Historic & Cultural Resources



16

**Total Mitigation Actions** 



**Education and Awareness Programs** 



Structure and Infrastructure Projects



Local Plans and Regulations



Natural Systems Protection



SV Population At Risk (2017)

1,792 Population at Risk (2017)

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# **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
17_01	Excavate and Remove Existing Storm Pipe, Stabilize Stream Banks, Replace Storm Pipe, and Install New Drainage Structure along Rose Court	Stabilization and drainage improvement of Rose Court, at the end of the cul-de-soc. Remediation of this hazard will include excavation and removal of the existing storm drainage pipe and flared end section, stabilization of stream banks, replacement of storm pipe, installation of a new drainage structure at a lower elevation, and installation of a flared end section. The banks of the stream and the area around the flared end section will be stabilized with river stone and/or gabion baskets.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Extreme Wind, Nor'easter, Hurricane and Tropical Storm, Winter Storm	Medium	Low	Township Engineer	FEMA HMA	\$2,000,000.00	1 year	Ongoing
17_02	Reconstruct Culvert on Plymouth Drive	Rehabilitation of the structure number 1316X68 will include repairing the existing voids behind the side walls of the culvert with a concrete type material, lining the culvert with a high-density polyethylene elliptical pipe, and grouting the annular space between the existing culvert and the lining. In conjunction with repair to the culvert rehabilitation to the adjacent embankments to prevent undermining and reduce or eliminate erosion.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Low	Township Engineer	FEMA HMA	\$250,000.00	1 year	Ongoing
17_03	Reconstruct Culvert on Hampton Drive	Rehabilitation of the structure number 1316X57 will include repairing the existing voids behind the side walls of the culvert with a concrete type material, lining the culvert with high-density polyethylene elliptical pipe, and grouting the annular space between the existing culvert and the lining. In conjunction with repair to the culvert, rehabilitation to the adjacent embankments to prevent undermining and reduce or eliminate erosion.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Low	Township Engineer	FEMA HMA	\$325,000.00	1 year	Ongoing
17_04	Reconstruct Culvert on Medford Boulevard	Rehabilitation of the structure number 1316X64 will include repairing the existing voids behind the side walls of the culvert with a concrete type material, lining the culvert with a high-density polyethylene elliptical pipe and grouting the annular space between the existing culvert and the lining. In conjunction with repair to the culvert rehabilitation to the adjacent embankments to prevent undermining and reduce or eliminate erosion.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Low	Township Engineer	FEMA HMA	\$500,000.00	1 year	Ongoing
17_05	Clean and De-snag Streams Throughout the Township	Clean vegetative and manmade debris, logs, and other items that are contributing to erosion and localized flooding.	Maintenance/Respon se/Recovery	Natural Systems Protection	Flood, Coastal Erosion, Nor'easter, Hurricane and Tropical Storm	Low	Low	Township Engineer, Superintendent of Public Works	FEMA HMA	\$500,000.00	1 year	Ongoing
17_06	Provide Hazard Mitigation Information/Training to Residents	Provide information and links to websites where residents can obtain more information about preparedness, education on water quality, and receive emergency alerts.	Administrative	Education and Awareness Programs	All Hazards	Medium	Low	Multiple Township Departments.	Municipal budget	\$10,000.00	5 + years	Ongoing
17_07	Purchase and Install Generators for Pump Stations	Purchase a mobile emergency generator to enable back up electricity at each water and sewer pump station location.		Structure and Infrastructure Project	Nor'easter, Hurricane and Tropical Storm, Winter Storm			Superintendent of Utilities		\$100,000.00		Completed

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Freehold, Township of	Freel	hold,	<b>Towns</b>	hip of
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# 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
17_08	Create a Wildfire Mitigation Plan and Provide Public Outreach on the Hazard	Evaluate areas at risk of wildfire, and provide create a plan to mitigate those areas while educating residents on wildfire risks and mitigation strategies.	Administrative	Natural Systems Protection	Wildfire	Medium	Low	Fire Department	Municipal budget	\$300,000.00	2 years	Ongoing
17_09	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Assist homeowners with Repetitive Loss or Severe Repetitive Loss properties to elevate, acquire, and/or demolish their home.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Medium	Emergency Management	FEMA HMA		2 years	Ongoing
17_10	Purchase and Install a Generator for Traffic Lights along the Route 9 and Route 537 Corridors	Purchase and install a hookup for generators along all major intersections along Route 9 and 537.	Maintenance/Respon se/Recovery	Structure and Infrastructure Project	All Hazards	High	Low	Township	FEMA HMA, DOT, Municipal budget, County budget	\$100,000.00	2 years	New
17_11	Purchase and Install a Generator for CentraState Hospital	Backup generator for CentraState Hospital.	Maintenance/Respon se/Recovery	Structure and Infrastructure Project	All Hazards	Medium	Low	Township, CentraState	FEMA HMA	\$200,000.00	1 year	New
17_12	Conduct a Microgrid Feasibility Study	Conduct a study on the feasibility of a microgrid for backup power at the hospital, police, municipal buildings, and fire house.	Administrative	Local Plans and Regulations	All Hazards	Medium	Low	Township Public Works, Administration	Municipal budget, Sustainable energy grants	\$150,000.00	2 years	New
17_13	Target Harden Police Headquarters by Installing Surveillance Cameras and Fencing	Increase security at Police Headquarters through a fence for the yard and surveillance equipment, such as cameras.	Maintenance/Respon se/Recovery	Structure and Infrastructure Project	Terrorism	Medium	Low	Township Police Department	Homeland Security grants, Municipal budget		1 year	New
17_14	Repair, Remove, or Rehabilitate the Lake Topanemus Dam	Repair, remove, or rehabilitate Lake Topanemus Dam, a High-Hazard Potential Dam, located along Doctors Creek.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Dam Failure	High	High	Township Engineering	Municipal budget, NJDEP Bureau of Dam Safety and Flood Control, FEMA HMA	\$0.00	3 years	New
17_15	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 budget		3 years	New

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Freeho	d, Township of					N	<b>⁄</b> Ionmou	th County	y HMP Miti	gation Act	tion Su	mmary
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
17_16	Purchase and Install a Larger Generator for the Water Treatment Plant	Purchase and install a new larger generator for the Freehold Township Water Treatment Plant. In addition to the new generator, it is also proposed to retrofit the electric within the existing building so that the new generator supplies power to all components of the entire facility (building, treatment plant and wells). Currently two (2) separate generators are required to run power to the existing water treatment plant and wells. The main generator to be replaced powers the treatment plant, three (3) of the five (5) existing wells and all associated chemical feeds. The existing secondary generator supplies power to the remaining two (2) wells and some lighting within the treatment facility. With the new generator servicing the entire facility, the secondary generator will be used as an emergency backup for partial plant capacity.	Maintenance/Respon se/Recovery	Structure and Infrastructure Project	All Hazards	High	High	The Freehold Township Superintendent of Facilities with assistance from	FEMA HMA (BRIC)	\$1,600,000.00	1 year	New

Friday, November 13, 2020

Community Action Number: 17 01

Freehold, Township of

#### **Describing the Action**

Action Name: Excavate and Remove Existing Storm Pipe, Stabilize Stream Banks, Replace Storm Pipe, and Install New Drainage

Structure along Rose Court

Action Category: Mitigation - Continuity of Fuctional Use

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Soil Stabilization

Action Description: Stabilization and drainage improvement of Rose Court, at the end of the cul-de-soc. Remediation of this hazard will

include excavation and removal of the existing storm drainage pipe and flared end section, stabilization of stream banks, replacement of storm pipe, installation of a new drainage structure at a lower elevation, and installation of a flared end section. The banks of the stream and the area around the flared end section will be stabilized with river

stone and/or gabion baskets.

#### **Evaluating the Action**

Hazard(s) Addressed: Extreme Wind, Nor'easter, Hurricane and Tropical Storm, Winter Storm

Goals: 3, 5, 6

Risk Reduction: Undermining and damage to storm drainage pipe and flared end section at the top of a steep embankment (Rose

Court, at the end of the cul-de-sac). Continued exposure to erosion will lead to further destruction to the adjacent storm drainage system as well the cause the flared end section to separate and fall off of the embankment in addition to erosion and flooding. The continued erosion represents an environmental impact as well as a potential

impact to existing structures and development.

Technical: This action is technically feasible.

Political: The potential for political and public support exists for this project.

Legal: The Township does have the legal authority to implement this project.

Environmental: The completion of this project would reduce the overall environmental impact to the tributaries in the area.

Social: Proposed action will have little effect on neighboring residents. No neighborhoods, voting districts, or persons of

lower income will be affected.

Administrative Capability: While an outside contractor will be required to complete the rehabilitation work, the Township has the personnel

and administrative capability to implement this action.

Local Champion: The Engineering Department is the advocate for this project.

Other Community Objectives: This action will meet other objectives including capital improvement and environmental.

STAPLEE Evaluation: N/A

#### **Implementing the Action**

Scale of Ease of Implementation:

Cost Estimate: \$2,000,000.00

Priority: Medium

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Responsible Party: Township Engineer

Low

Local Planning Mechanism: The engineering department will implement and oversee this project.

Likely Funding Source(s): FEMA HMA

Timeline: 1 year
Action Status: Ongoing

Notes: Ongoing 2015 action; the Township is monitoring funding opportunities every year.

Community Action Number: 17 02

Freehold, Township of

#### **Describing the Action**

Action Name: Reconstruct Culvert on Plymouth Drive

Action Category: Mitigation - Continuity of Fuctional Use

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Mitigation Reconstruction

Action Description: Rehabilitation of the structure number 1316X68 will include repairing the existing voids behind the side walls of the culvert with a concrete type material, lining the culvert with a high-density polyethylene elliptical pipe, and grouting

the annular space between the existing culvert and the lining. In conjunction with repair to the culvert rehabilitation

to the adjacent embankments to prevent undermining and reduce or eliminate erosion.

#### **Evaluating the Action**

Hazard(s) Addressed: Flood, Nor'easter, Hurricane and Tropical Storm

Goals: 3, 5

Risk Reduction: The existing culvert at Plymouth Drive (Structure No. 1316X68) over the Tributary to the Manasquan River is in poor

condition and has advanced section loss to the primary structural elements. Continued exposure to average and high

frequency storms will further degrade the structure and lead to failure.

Technical: The action is feasible.

Political: The potential for public and political support for this action does exist.

Legal: Freehold Township does have the authority to implement this action.

Environmental: This action will comply with environmental actions as well as reduce or eliminate environmental impacts that are a

direct result of the existing hazard.

Social: The neighboring residential properties will only be affected during the construction. This action will not disrupt

established neighborhoods, break up voting districts, or cause the relocation of lower income people.

Administrative Capability: The Township has the personnel and administrative capabilities to implement, maintain, and inspect the action

however, a contractor will be required in order to complete the demolition and construction.

Local Champion: A strong advocate for the action among local departments will support the implementation.

Other Community Objectives: This action will further other community objectives including capital improvements and environmental quality.

STAPLEE Evaluation: N/A

#### Implementing the Action

Cost Estimate: \$250,000.00

Priority: High

Scale of Ease of Implementation: Low

Responsible Party: Township Engineer

Local Planning Mechanism: Engineering will be used to implement the action.

Likely Funding Source(s): FEMA HMA

Timeline: 1 year

Action Status: Ongoing

Notes: Ongoing 2015 action; in design phase – completed and submitted to DEP.

Community Action Number: 17 03

Freehold, Township of

#### **Describing the Action**

Action Name: Reconstruct Culvert on Hampton Drive

Action Category: Mitigation - Continuity of Fuctional Use

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Mitigation Reconstruction

Action Description: Rehabilitation of the structure number 1316X57 will include repairing the existing voids behind the side walls of the

culvert with a concrete type material, lining the culvert with high-density polyethylene elliptical pipe, and grouting the annular space between the existing culvert and the lining. In conjunction with repair to the culvert, rehabilitation

to the adjacent embankments to prevent undermining and reduce or eliminate erosion.

#### **Evaluating the Action**

Hazard(s) Addressed: Flood, Nor'easter, Hurricane and Tropical Storm

Goals: 3, 5

Risk Reduction: The existing culvert at Hampton Drive (Structure No. 1316X57) over the Tributary to the Manasquan River is in poor

condition and has advanced section loss to the primary structural elements. Continued exposure to overage and high

frequency storms will further degrade the structure and lead to failure.

Technical: This action is technically feasible.

Political: There is potential for political and public support for this action.

Legal: NJDEP permits will be required for the work however, the Township has the authority to implement the action.

Environmental: This action will comply with all environmental regulations. The completion of this action will mitigate the erosion of

the tributary.

Social: The action will temporarily affect the neighboring properties during construction however, there will be no long-

term disruption to neighborhoods, voting districts, or lower income people.

Administrative Capability: While a contractor will be needed to complete the rehabilitation work, the Township does have the personnel and

administrative capability to implement and maintain the action.

Local Champion: Borough Administrator, Elected Officials, OEM, Fire Department Officials, Police Department Officials, EMS Officials

Other Community Objectives: This action will meet other community objectives including capital improvements and environmental quality.

STAPLEE Evaluation: N/A

#### **Implementing the Action**

Cost Estimate: \$325,000.00

Priority: High

Scale of Ease of Implementation: Low

Responsible Party: Township Engineer

Local Planning Mechanism: Township Engineering Department will implement and oversee this action

Likely Funding Source(s): FEMA HMA

Timeline: 1 year

Action Status: Ongoing

Notes: Ongoing 2015 action; the Township still views this project as a high priority and is searching for potential funding.

Community Action Number: 17 04

Freehold, Township of

#### **Describing the Action**

Action Name: Reconstruct Culvert on Medford Boulevard

Action Category: Mitigation - Continuity of Fuctional Use

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Mitigation Reconstruction

Action Description: Rehabilitation of the structure number 1316X64 will include repairing the existing voids behind the side walls of the

culvert with a concrete type material, lining the culvert with a high-density polyethylene elliptical pipe and grouting the annular space between the existing culvert and the lining. In conjunction with repair to the culvert rehabilitation

to the adjacent embankments to prevent undermining and reduce or eliminate erosion.

#### **Evaluating the Action**

Hazard(s) Addressed: Flood, Nor'easter, Hurricane and Tropical Storm

Goals: 3, 5

Risk Reduction: The existing culvert at Medford Boulevard (Structure No. 1316X64) over the Tributary to the Manasquan River is in

poor condition and has advanced section loss to the primary structural elements. Continued exposure to average

and high frequency storms will further degrade the structure and lead to failure.

Technical: This action is technically feasible.

Political: NJDEP permits will be required for the work however, the Township does have the authority to implement the action.

Legal: No legal issues; system in place.

Environmental: This action will comply with all environmental regulations. The completion of this action will mitigate the erosion of

the Tributary.

Social: This action will temporarily affect the neighboring properties during construction however, there will be no long

term disruption to neighborhoods voting districts or lower income people.

Administrative Capability: While a contractor will be needed to complete the rehabilitation work, the Township does have the personnel and

administrative capability to implement and maintain the action.

Local Champion: The township as a whole will support this action.

Other Community Objectives: This action will meet other community objectives including capital improvements and environmental quality.

STAPLEE Evaluation: N/A

#### **Implementing the Action**

Cost Estimate: \$500,000.00

Priority: High

Scale of Ease of Implementation: Low

Responsible Party: Township Engineer

Local Planning Mechanism: Township Engineering Department will implement and oversee this action.

Likely Funding Source(s): FEMA HMA

Timeline: 1 year

Action Status: Ongoing

Notes: Ongoing 2015 action; the Township still views this project as a high priority and is searching for potential funding.

Community Action Number: 17 05

Freehold, Township of

#### **Describing the Action**

Action Name: Clean and De-snag Streams Throughout the Township

Action Category: Maintenance/Response/Recovery

Action Type: Natural Systems Protection

HMA Eligible Activity: Floodplain and Stream Restoration

Action Description: Clean vegetative and manmade debris, logs, and other items that are contributing to erosion and localized flooding.

#### **Evaluating the Action**

Hazard(s) Addressed: Flood, Coastal Erosion, Nor'easter, Hurricane and Tropical Storm

Goals: 3, 5

Risk Reduction: Heavy sediment, vegetative, deposits, and manmade debris in stream segments contribute to erosion and reduction

in natural infiltration, causing flooding in heavy rain events.

Technical: This action is feasible.

Political: The potential Jar political and public support does exist.

Legal: While DEP permits will be required the township does have the authority to implement this action.

Environmental: The environmental impacts will be reduced as a result of this action. This action will comply with all environmental

regulations.

Social: The proposed action will not adversely affect the population, break up neighborhoods, voting districts, or lower

income people.

Administrative Capability: The Township has the administrative and personnel capability to implement this action.

Local Champion: The Engineering Department is the advocate for this project.

Other Community Objectives: This project will help accomplish other objectives including reducing environmental impacts, and improving storm

water management and water quality.

STAPLEE Evaluation: N/A

#### **Implementing the Action**

Cost Estimate: \$500,000.00

Priority: Low
Scale of Ease of Implementation: Low

Responsible Party: Township Engineer, Superintendent of Public Works

Local Planning Mechanism: Engineering department will implement and oversee this action in conjunction with the township Public Works Dep

Likely Funding Source(s): FEMA HMA

Timeline: 1 year
Action Status: Ongoing

Notes: Continuous ongoing 2015 action; Public Works have the equipment to access logs from roads.

Community Action Number: 17 06

Freehold, Township of

#### **Describing the Action**

Action Name: Provide Hazard Mitigation Information/Training to Residents

Action Category: Administrative

Action Type: Education and Awareness Programs

HMA Eligible Activity: Miscellaneous/Other/NA

Action Description: Provide information and links to websites where residents can obtain more information about preparedness,

education on water quality, and receive emergency alerts.

#### **Evaluating the Action**

Hazard(s) Addressed: All Hazards

Goals: 3, 4, 7

Risk Reduction: The general public's understanding of natural hazards and mitigation possibilities could be improved. By the year

2040, Freehold Township is projected to have a population increase of 16.3% over 2010 values, exposing more people to hazards. The community's overall level of disaster resistance would increase if a greater number of

households undertook low-cost or no-cost, small-scale mitigation activities.

Technical: This action is feasible.

Political: Political and public support does exist to support this action.

Legal: The township does have the authority to implement this action.

Environmental: N/A

Social: This action will not negatively affect any segment of the population.

Administrative Capability: The Township has the administrative and personnel capabilities to implement this plan.

Local Champion: Hazard Mitigation Plan

Other Community Objectives: Advocacy for this action within the township does exist.

STAPLEE Evaluation: N/A

#### **Implementing the Action**

Cost Estimate: \$10,000.00
Priority: Medium

Scale of Ease of Implementation: Low

Responsible Party: Multiple Township Departments.

Local Planning Mechanism: Multiple Township Departments.

Likely Funding Source(s): Municipal budget

Timeline: 5 + years
Action Status: Ongoing

Notes: Ongoing 2015 action; the Township has implemented Reverse 11, Facebook pages specific t the Police and

stormwater and water quality, Twitter, and Nixle.

Community Action Number: 17 07

Freehold, Township of

**Describing the Action** 

Action Name: Purchase and Install Generators for Pump Stations

Action Category:

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Generators

Action Description: Purchase a mobile emergency generator to enable back up electricity at each water and sewer pump station location.

**Evaluating the Action** 

Hazard(s) Addressed: Nor'easter, Hurricane and Tropical Storm, Winter Storm

Goals: 3, 7

Risk Reduction: Downed trees on power lines contribute to power outages during severe storms with high winds such as nor'easter,

hurricanes, and tropical storms. Climate change will contribute to more frequent and severe weather events. Power outages impact the Township's ability to maintain critical services and public safety. Power failure may result in lack

of water and sewer service for Township.

Technical: This action is feasible.

Political: Political and public support does exist to support this action.

Legal: The Township has the authority to implement this action.

Environmental: Sewage back-up and overflow into local storm sewer or tributaries will be avoided.

Social: This action will not negatively affect any segment of the population.

Administrative Capability: The Township has the administrative and personnel capabilities to implement this plan.

Local Champion: The Township has the administrative and personnel capabilities to implement this plan.

Other Community Objectives: Advocacy for this action within the Township does exist.

STAPLEE Evaluation: N/A

**Implementing the Action** 

Cost Estimate: \$100,000.00

Priority:

Scale of Ease of Implementation:

Responsible Party: Superintendent of Utilities

Local Planning Mechanism: Purchase of unit will be implemented by appropriate township personal.

Likely Funding Source(s):

Timeline:

Action Status: Completed

Notes: The Township was awarded HMGP funding of \$95,250 for Generator for Fire Station.

Community Action Number: 17 08

Freehold, Township of

**Describing the Action** 

Action Name: Create a Wildfire Mitigation Plan and Provide Public Outreach on the Hazard

Action Category: Administrative

Action Type: Natural Systems Protection
HMA Eligible Activity: Miscellaneous/Other/NA

Action Description: Evaluate areas at risk of wildfire, and provide create a plan to mitigate those areas while educating residents on

wildfire risks and mitigation strategies.

**Evaluating the Action** 

Hazard(s) Addressed: Wildfire

Goals: 3, 4, 5

Risk Reduction: Freehold Township has a moderate extent of land in mapped high or extreme wildfire risk areas. Most at-risk areas

are in the southern half of the Township.

Technical: This action is feasible.

Political: The potential for political and public support does exist.

Legal: No legal issues anticipated.

Environmental: The environmental impacts will be reduced as a result of this action. This action will comply with all environmental

regulations.

Social: The proposed action will not adversely affect the population, break up neighborhood, voting districts, or lower

income people.

Administrative Capability: The Township has the administrative and personnel capability to implement this action.

Local Champion: The Fire and Engineering Departments

Other Community Objectives:

STAPLEE Evaluation: N/A

**Implementing the Action** 

Cost Estimate: \$300,000.00

Priority: Medium

Scale of Ease of Implementation: Low

Responsible Party: Fire Department

Local Planning Mechanism: State Forest Fire Service, Local Fire Department, Emergency Management

Likely Funding Source(s): Municipal budget

Timeline: 2 years
Action Status: Ongoing

Notes: Ongoing 2015 action; the Township drafted a Wildfire Protection Plan and are looking into controlled burns to

reduce the risk of wildfire.

Community Action Number: 17 09

Freehold, 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: Assist homeowners with Repetitive Loss or Severe Repetitive Loss properties to elevate, acquire, and/or demolish

their home.

**Evaluating the Action** 

Hazard(s) Addressed: Flood, Nor'easter, Hurricane and Tropical Storm

Goals: 2, 3, 4,

Risk Reduction: Several residential structures throughout the community are prone to flooding, with their main floor elevations

below current BFEs. Sea Level Rise and climate change will contribute to more frequent and severe flooding and

surge events.

Technical: Elevation and acquisition are both technically feasible project types.

Political: Political leadership supports this type of project.

Legal: While the municipality does not own the structures in question, the Township fully supports the homeowners in

moving forward.

Environmental: No environmental impacts are anticipated at this time; this would be confirmed as specific homeowners come

forward and their property details are reviewed. It is likely that environmental impacts would be positive, as

household hazardous wastes are no longer introduced into floodwaters.

Social: No particular social group in our community is likely to be disproportionately impacted by this project; this would be

re-evaluated as particular interested homeowners come forward.

Administrative Capability: Township has the administrative capabilities to manage an elevation and/or acquisition project.

Local Champion: Affected homeowners, elected officials

Other Community Objectives: Improve and protect lifestyles of residents; reduction of costly property damage; resiliency; floodplain management;

capital improvements

STAPLEE Evaluation: 12

#### **Implementing the Action**

Cost Estimate:

Priority: High

Scale of Ease of Implementation: Medium

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Responsible Party: Emergency Management

Local Planning Mechanism: Homeowners; Mayor; Council; Administrator; Engineer; local ordinance; Hazard Mitigation Plan

Likely Funding Source(s): FEMA HMA
Timeline: 2 years

Action Status: Ongoing

Notes: Ongoing 2015 action; two properties remain on the RL list.

Community Action Number: 17 10

Freehold, Township of

#### **Describing the Action**

Action Name: Purchase and Install a Generator for Traffic Lights along the Route 9 and Route 537 Corridors

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Generators

Action Description: Purchase and install a hookup for generators along all major intersections along Route 9 and 537.

#### **Evaluating the Action**

Hazard(s) Addressed: All Hazards

Goals: 3, 7

Risk Reduction: Traffic accidents along Route 9 and 537 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: Township has sufficient capacity and experience to administer this action.

Local Champion: OEM, Police

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: Township

Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): FEMA HMA, DOT, Municipal budget, County budget

Timeline: 2 years
Action Status: New

Community Action Number: 17 11

Freehold, Township of

#### **Describing the Action**

Action Name: Purchase and Install a Generator for CentraState Hospital

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Generators

Action Description: Backup generator for CentraState Hospital.

#### **Evaluating the Action**

Hazard(s) Addressed: All Hazards

Goals: 3, 7

Risk Reduction: Currently, the hospital is at risk of a power failure during any severe weather event. A generator will provide backup

power a vulnerable population.

Technical: Technically feasible.

Political: Politically acceptable and encouraged in order to better prepare residents

and create more resilient communities.

Legal: No legal issues anticipated.

Environmental: No adverse environmental effects anticipated.

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

local services during emergencies.

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

Local Champion: Hospital, EMS

Other Community Objectives:

STAPLEE Evaluation: N/A

#### Implementing the Action

Cost Estimate: \$200,000.00
Priority: Medium

Scale of Ease of Implementation: Low

Responsible Party: Township, CentraState
Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): FEMA HMA

Timeline: 1 year
Action Status: New

Community Action Number: 17 12

Freehold, Township of

#### **Describing the Action**

Action Name: Conduct a Microgrid Feasibility Study

Action Category: Administrative

Action Type: Local Plans and Regulations
HMA Eligible Activity: Miscellaneous/Other/NA

Action Description: Conduct a study on the feasibility of a microgrid for backup power at the hospital, police, municipal buildings, and

fire house.

#### **Evaluating the Action**

Hazard(s) Addressed: All Hazards

Goals: 3, 7

Risk Reduction: A microgrid would reinforce the Township's power supply. The microgrid would prevent prolonged power outages

such as the ones experienced during Superstorm Sandy. A microgrid can remain connected to the wider electric grid

but can also function independently during an emergency situation.

Technical: Technically feasible.

Political: No adverse political ramifications are expected.

Legal: No legal impediments anticipated.

Environmental: No adverse environmental impact anticipated.

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

local services during emergencies.

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: \$150,000.00
Priority: Medium

Scale of Ease of Implementation: Low

Responsible Party: Township Public Works, Administration

Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): Municipal budget, Sustainable energy grants

Timeline: 2 years
Action Status: New

Community Action Number: 17 13

Freehold, Township of

#### **Describing the Action**

Action Name: Target Harden Police Headquarters by Installing Surveillance Cameras and Fencing

Action Category: Maintenance/Response/Recovery
Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Green Infrastructure

Action Description: Increase security at Police Headquarters through a fence for the yard and surveillance equipment, such as cameras.

#### **Evaluating the Action**

Hazard(s) Addressed: Terrorism

Goals: 2, 3, 5

Risk Reduction: Police Headquarters remain vulnerable to an attack.

Technical: Technically feasible.

Political: No adverse political ramifications are expected.

Legal: No legal impediments anticipated; property owned by Township.

Environmental: No adverse environmental impact anticipated.

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

local services during emergencies.

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

Local Champion: Police Department

Other Community Objectives:

STAPLEE Evaluation: N/A

#### **Implementing the Action**

Cost Estimate:

Priority: Medium
Scale of Ease of Implementation: Low

Responsible Party: Township Police Department

Local Planning Mechanism: Hazard Mitigation Plan

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

Timeline: 1 year
Action Status: New

Community Action Number: 17 14

Freehold, Township of

#### **Describing the Action**

Action Name: Repair, Remove, or Rehabilitate the Lake Topanemus 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 Lake Topanemus Dam, a High-Hazard Potential Dam, located along Doctors Creek.

#### **Evaluating the Action**

Hazard(s) Addressed: Dam Failure

Goals: 1, 2, 3

Risk Reduction: NJDEP classifies Lake Topanemus 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: No adverse political implications.

Legal: May require coordination with NJDEP.

Environmental: Minor affects to the environment.

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:

#### **Implementing the Action**

Cost Estimate: \$0.00
Priority: High

Scale of Ease of Implementation: High

Responsible Party: Township Engineering

Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): Municipal budget, NJDEP Bureau of Dam Safety and Flood Control, FEMA HMA

Timeline: 3 years
Action Status: New

Notes: FEMA has a National Dam Safety Program with funding available to High-Hazard Potential Dams, however, the Lake

Topanemus Dam does not qualify for funding at the time of this plan update.

Community Action Number: 17\_15

Freehold, 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, 2, 5

Risk Reduction: Freehold Township is in the USGS landslide hazard maps as "high landslide incidence."

Technical: Technically feasible.

Political: No adverse political implications.

Legal: No legal impediments anticipated.

Environmental: No adverse environmental impact anticipated.

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 budget

Timeline: 3 years
Action Status: New

Community Action Number: 17 16

Freehold, Township of

#### **Describing the Action**

Action Name: Purchase and Install a Larger Generator for the Water Treatment Plant

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Generators

Action Description: Purchase and install a new larger generator for the Freehold Township Water Treatment Plant. In addition to the

new generator, it is also proposed to retrofit the electric within the existing building so that the new generator supplies power to all components of the entire facility (building, treatment plant and wells). Currently two (2) separate generators are required to run power to the existing water treatment plant and wells. The main generator to be replaced powers the treatment plant, three (3) of the five (5) existing wells and all associated chemical feeds. The existing secondary generator supplies power to the remaining two (2) wells and some lighting within the treatment facility. With the new generator servicing the entire facility, the secondary generator will be used as an

emergency backup for partial plant capacity.

#### **Evaluating the Action**

Hazard(s) Addressed: All Hazards

Goals: 3, 7

Risk Reduction: This mitigation action reduces the risk of power loss at the water treatment facility. The treatment facility serves

approximately 32,000 people in addition to CentraState Medical Center and assisted living facilities.

Technical: The action is feasible and a long-term solution throughout the life of the generator.

Political: Political and public support does exist to support this action.

Legal: The Township has authority to implement this action.

Environmental: The generator project will comply with all environmental regulations.

Social: This action will not negatively affect any segment of the population.

Administrative Capability: The Township has the administrative and personnel capabilities to implement this action.

Local Champion: The Township has the administrative and personnel capabilities to implement this action.

Other Community Objectives: Advocacy for this action within the Township does exists. This facility is critical to the community as a whole

including the Residents, CentraState Medical Center, Assisted Living Facilities, Businesses, etc.

STAPLEE Evaluation: 10

#### **Implementing the Action**

Cost Estimate: \$1,600,000.00

Priority: High Scale of Ease of Implementation: High

Responsible Party: The Freehold Township Superintendent of Facilities with assistance from the Freehold Township Engineering

Department.

Local Planning Mechanism: We have developed a cost estimate and have held preliminary plan discussions and meetings with our consultants

for design.

Likely Funding Source(s): FEMA HMA (BRIC)

Timeline: 1 year
Action Status: New

Notes: The Township of Freehold is currently applying for the 2020 Building Resilient Infrastructure & Communities (BRIC)

Grant.

Name: Raymond Piccolini Title: OEM Coordinator

Jurisdiction: Freehold Township 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> <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	1. 2013
Capital Improvements Plan	Yes	2019 – 2024, as part on the municipal budget process.
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	Updated 2019
Continuity of Operations Plan	Yes	As indicated in Emergency Operation Plan
Post-Disaster Recovery Plan	Yes	As indicated in Emergency Operation Plan
Transportation Plan	Yes	1.An element of the 2013 Master Plan
Stormwater Management Plan	Yes	1. An element of the 2013 Master Plan
Community Wildfire Protection Plan	No	



Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	No	
Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code	Yes	Version/Year: IBC 2015
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire Department ISO rating		Rating:
Site Plan Review Requirements	Yes	2019 Minor/Major Site Plan Application Package
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	
Natural hazard ordinance (stormwater, steep slope, wildfire)		
Flood Insurance Rate Maps	Yes	
Acquisition of Land for Open Space and Public Recreation Uses	No	
Post-Disaster Recovery Ordinance	No	
Real Estate Disclose Ordinance	Yes	



Other (ie. Special Purposes Ordinance)	Yes	Special Purposes Ordinance						
How can the above capabilities be expanded and improved to reduce risk?								

# **Administrative & Technical**

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

Administration	Yes/No	Describe capability Is coordination effective?
Planning Commission		is coordination effective:
Mitigation Planning Committee	Yes	Applicable department heads and personnel
Maintenance Programs to Reduce Risk (e.g., tree trimming, clearing drainage systems)	Yes	
Mutual Aid Agreements	Yes	Private facilities have to develop their own evacuation routes, but the local OEM reviews it Shelters are coordinated with County Biotech High School
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	Full Time
Floodplain Administrator	No	
Emergency Manager	Yes	OEM Coordinator (on call 24/7) LEPC members as appropriate
Community Planner	Yes	

Civil Engineer	Yes	Full Time
Surveyor	Yes	Full Time
GIS <del>Coordinator</del> <b>Specialist</b>	Yes	Full Time
Scientists familiar with the hazards of the community	Yes	
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)	Yes	Reverse 9-1-1  Town-wide Email Distribution  Social Media Broadcast  Public Address announcements from emergency vehicles Portable variable message boards
Hazard Data and Information		
Grant Writing	No	
Hazus Analysis	Yes	
Other		
How can the above capabilities be	expanded	and improved to reduce risk?



# **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	2015: DPW and Pump Station generators
Authority to Levy Taxes for Specific Purposes	No	Utility Assessment Trust only.
Fees for Water, Sewer, Gas, or Electric Services	No	Operating expenses, CIF or Capital Outlays only.
Impact Fees for New Development	Yes	Potential for developers to contribute funds.
Stormwater Utility Fee	No	
Incur Debt Through Private Activities	No	
Community Development Block Grant	Yes	For Township improvements only.
Other Federal Funding Programs	No	
State Funding Programs	Yes	Grants
Other (e.g., withhold spending in hazard-prone areas)	Yes	Incur Debt through General Obligation Funds
How can these capabilities be exp	anded and i	mproved to reduce risk?

# **Education and Outreach**

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

Program/Organization	Yes/No	Describe program/organization and how it relates to disaster resilience and mitigation.  Could the program/organization help implement future mitigation activities?
Local Citizen Groups or Non- Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.		
Ongoing Public Education or Information Programs (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Local OEM frequently conducts training sessions/drills in schools, private businesses, mall, hospital, etc
Natural Disaster or Safety Related School Programs	Yes	Periodic emergency drills and training at all Township and Regional Schools
StormReady Certification		
Firewise Communities Certification		
Public-Private Partnership Initiatives Addressing Disaster Related Issues		
Other	Yes	Police department has a Facebook page Township has a Facebook page
How can these capabilities be expa	anded and in	mproved to reduce risk?

Vacant

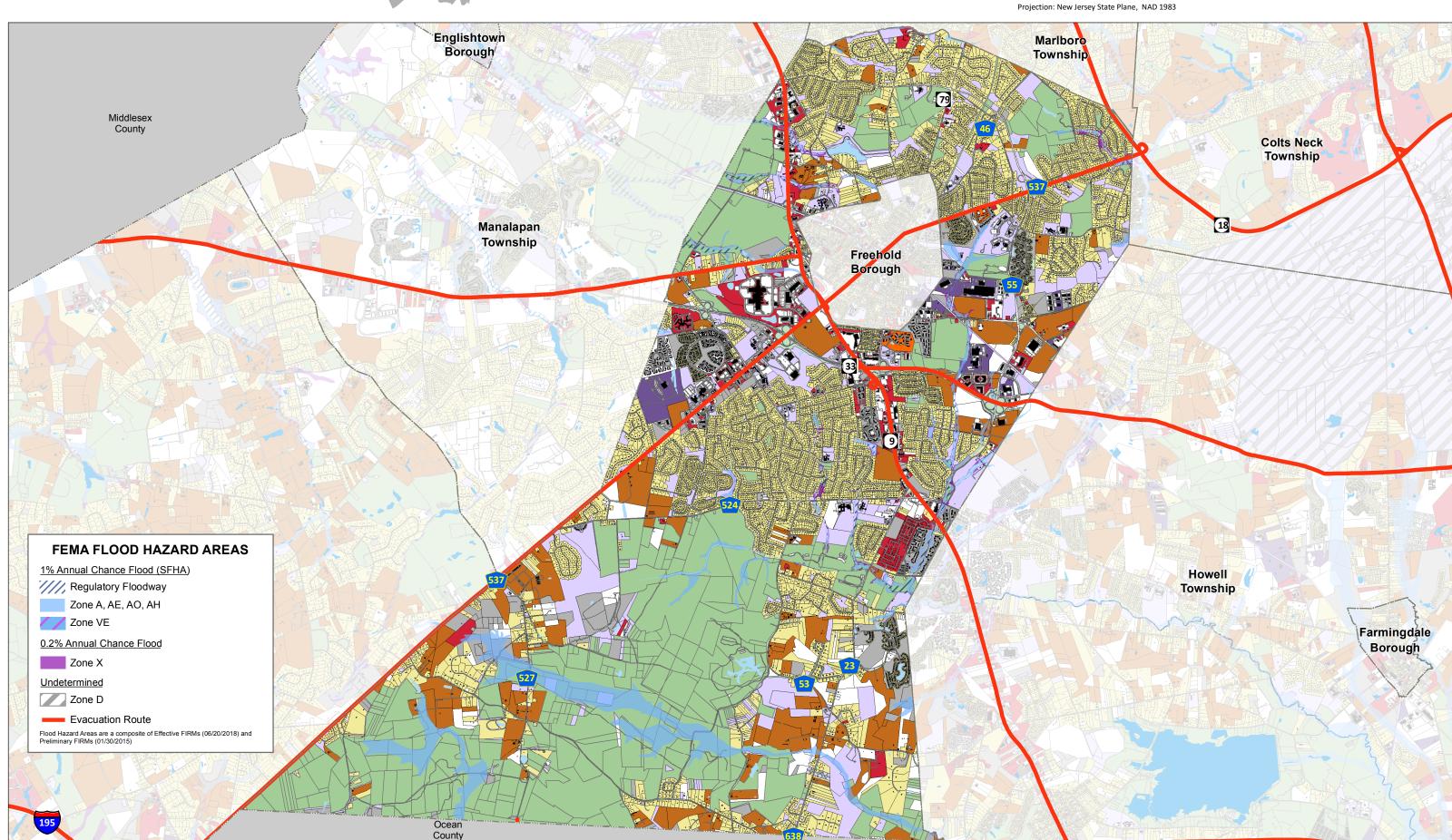
Industrial Commercial Apartment Residential (four families or less) Civic/Public (Tax Exempt) Unclassified Open Space 2,500 5,000

Source: 2014 Esri; Monmouth County;

NJOIT-OGIS; NJGIN MODIV Parcel, FEMA







Parcel Classification

Vacant

Industrial Commercial Apartment Residential (four families or less)

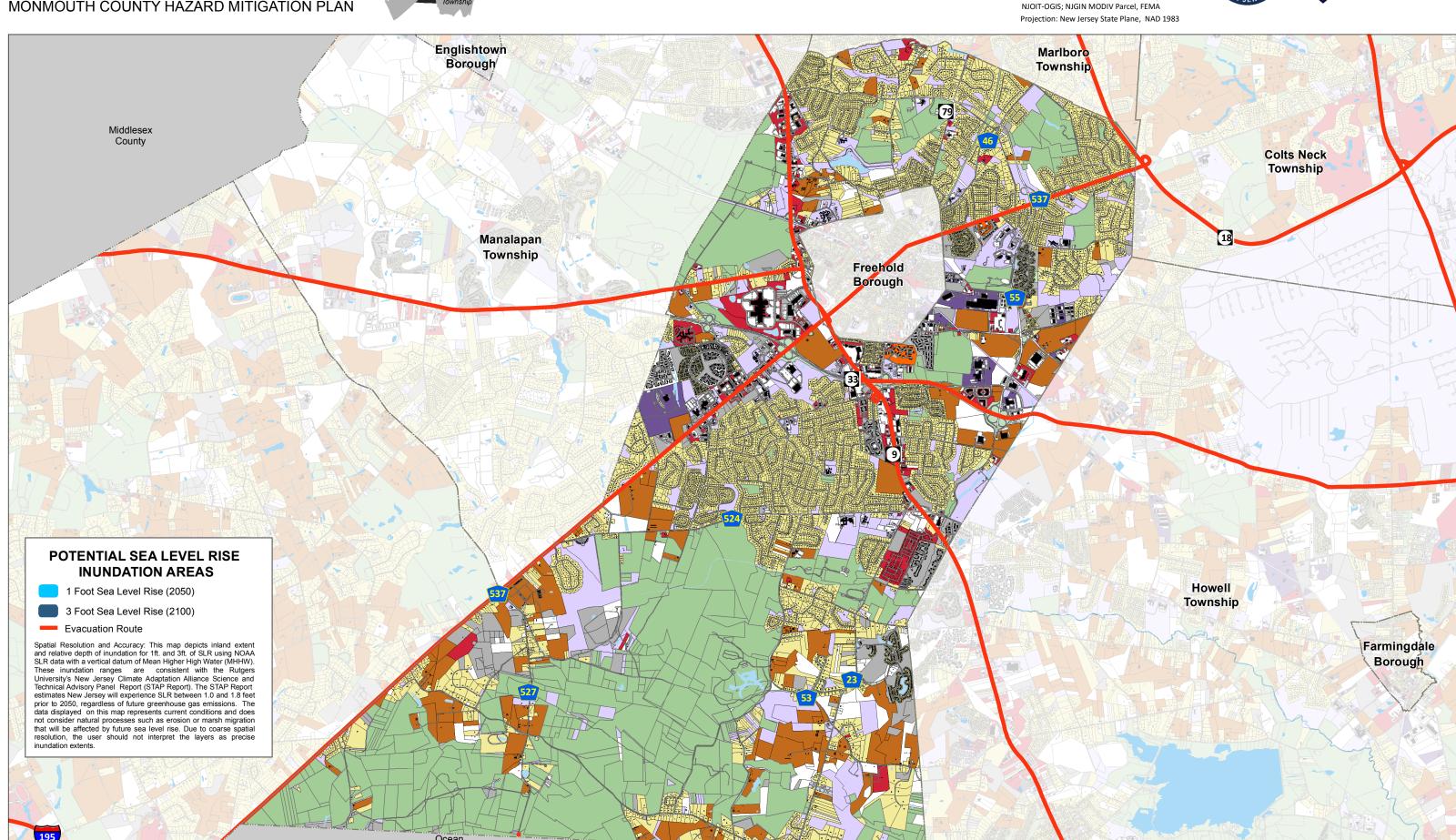
Civic/Public (Tax Exempt) Unclassified Open Space

2,500 5,000

Source: 2014 Esri; Monmouth County;







County









#### **MEETING NOTES**

Topic: Freehold Township- Monmouth County HMP Meeting

**Date:** May 23, 2019

Time: 2:00 PM- 3:00 PM

Location: Town Hall; Room 214, One Municipal Plaza Freehold, NJ 07728

Attendees: Matthew Bryant, Assistant Twp Engineer

Raymond Piccolini, OEM Coordinator

Tim White, Twp Engineer

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:**

- Community Action 16 01 Stabilization and drainage improvement of Rose Court Ongoing
  - o Erosion and flood
  - Monitoring every year
- Community Action 16\_02 Rehabilitation Ongoing
  - Designing phase completed and submitted to DEP
- Community Action 16\_03 Rehabilitation and improvement of culvert on Hampton Drive Ongoing
- Community Action 16\_04 Rehabilitation and improvement of culvert on Medford Boulevard Ongoing
- Community Action 16\_05 Cleaning and desnagging of streams for improved stormwater management Ongoing
  - A continuous ongoing action



# Monmouth County Multi-Jurisdictional Hazard Mitigation Plan Update







- Log jams → Public Works have the equipment to access logs from road
- Community Action 16\_06 Provide information and training to township residents, increase awareness, and preparedness Ongoing
  - Police Facebook page
  - o Reverse 911
  - Stormwater and water quality on website
  - o Twitter
  - Nixle did not have a good response
  - Twp has a separate Facebook page
- Community Action 16\_07 Protection of infrastructure and critical facilities Completed
- Community Action 16\_08 Natural resource, environmental, and structural protection Ongoing
  - Draft of wildfire protection → did not adopt
  - Jurisdiction of DEP or County → border of Manalapan
  - o Controlled burns?
- Community Action 16 09 Elevation and/or acquisition of FEMA's RL and SRL list Ongoing

#### 2020 Mitigation Actions (NEW):

- Generators for Route 9 and Route 537 traffic lights
- Generators for the hospital
- Smart Grid/micro grid backup for hospital, police, municipal buildings, fire house
- Hookups for generators
- Police headquarters fence for yard, surveillance equipment, Cameras

#### Successes:

- Simulate emergency situations with the hospital
- OEM training in the schools, private offices, municipal offices, the mall, the movie theater
- Generators for portable traffic lights
- Ordinance fueling stations need/required to have generators to maintain fuel pumps
- Digital signs for price of fuel → ordinance allows town to can take sign in case of emergency









# Meeting: Freehold Twp. HMP Mtg

Date: 65-23-19

							Initial
		RACIS	Bryant	White	Piccolini	YASte	Last Name
		Jac	Matthew	1:3	Raymond	Michael	First Name
	1 000	Root Promis Dir.	Hest. Township Ergoner	Tup. Engineer	DEM GOD	Planer	Title
		MCPB	Freehold Tup	Frankild Imp	weefold tup	TRN	Organization
		Joe BARRIS @ CO. PON RUTH, NJ. MA	55t. Township Enginer Freehold Tup, inbryant @ tup. Freehold is us	Frankild Tup twhite @ tup. Keeh, ld. nj. vs	rpicco lini to tup. Scenold. nj. 05	Michael. Yaste consider juti. w.	Email Address