

Linkages

Getting to Resilience

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Hazard Mitigation Implementation

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Risk & Vulnerability Assessments



Has your community discussed and/or identified previous coastal hazards and disasters?

You answered:

✔ Yes



CRS Suggestions

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **New Study (NS):** Up to 290 points for new flood studies that produce base flood elevations or floodways.
- **Floodplain mapping of special flood-related hazards (MAPSH):** Up to 50 points if the community maps and regulates areas of special flood related hazards.

CRS points : 340



Sustainable Jersey Suggestions

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SJ points : 20



Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider these elements as specified by the FEMA Local Mitigation Plan Review Guide.


Element B.2.a. The plan must include the history of previous hazard events for each of the identified hazards.

Element B.2.c. Plan updates must include hazard events that have occurred since the last plan was developed.

71.5 **Has your community documented previous coastal hazards and disasters through historical information, existing plans and reports, scientific knowledge, and/or local knowledge?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **New Study (NS):** Up to 290 points for new flood studies that produce base flood elevations or floodways.
- **Floodplain mapping of special flood-related hazards (MAPSH):** Up to 50 points if the community maps and regulates areas of special flood related hazards.

CRS points : 340

 **Sustainable Jersey Suggestions**

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SJ points : 20

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider these elements as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.2.a. The plan must include the history of previous hazard events for each of the identified hazards.

Element B.2.c. Plan updates must include hazard events that have occurred since the last plan was developed.

1.8 **Has your community defined hazard probability, frequency, magnitude, and duration?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **New Study (NS):** Up to 290 points for new flood studies that produce base flood elevations or floodways.
- **Floodplain mapping of special flood-related hazards (MAPSH):** Up to 50 points if the community maps and regulates areas of special flood related hazards.

 **Sustainable Jersey Suggestions**

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SJ points : 20

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.c. The description, or profile, must include information on location, extent, previous occurrences, and future probability for each hazard. Extent means the strength or magnitude of the hazard.

Element B.2.b. The plan must include the probability of future events for each identified hazard. Probability means the likelihood of the hazard occurring and may be defined in terms of general descriptors (for example, unlikely, likely, highly likely), historical frequencies, statistical probabilities (for example: 1% chance of occurrence in any given year), and/or hazard probability maps. If general descriptors are used, then they must be defined in the plan. For example, "highly likely" could be defined as equals near 100% chance of occurrence next year or happens every year.

Has your community identified coastal erosion and/or shoreline change as a hazard? How?

You answered:

✓ Yes

 **CRS Suggestions**

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **Floodplain mapping of special flood-related hazards (MAPSH):** Up to 50 points if the community maps and regulates areas of special flood related hazards.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood prone lands free of development, and protect and enhance the natural functions of flood plains.

- **Special flood-related hazards open space (SHOS):** Up to 50 points if the OSP credited parcels are subject to one of the special flood-related hazards or if areas of special flood related hazard are covered by low density zoning regulations.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program.

- **Special Flood-related Hazard Regulations (SHR):** Up to 370 points for higher regulatory standards in areas subject to coastal erosion.

Section 440: Flood Data Maintenance: To make community floodplain data more accessible, current, useful, and/or accurate so that the information contributes to the improvement of local regulations, insurance rating, planning, disclosure, and property appraisals.

- **Erosion Data Maintenance (EDM):** up to 20 points for maintaining coastal erosion data.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood drainage and storage capacity are maintained.

- **Coastal Erosion Protection Maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion prone areas.

CRS points : 590

 **Sustainable Jersey Suggestions**

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SJ points : 20

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.4 Does your community identify sea level rise as a hazard? How?

You answered:

✓ Yes

CRS Suggestions

Section 340: Hazard Disclosure: To disclose a property's potential flood hazard to potential buyers before the lender notifies them of the need for flood insurance.

- **Disclosure of Other Hazards (DOH):** Up to 8 points if the notification to prospective buyers includes disclosure of other flood related hazards, such as erosion, subsidence, or wetlands.

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **Higher Study Standards (HSS):** Up to 160 points if the new study was done to one or more standards higher than the FEMA mapping criteria.

CRS points : 168

Sustainable Jersey Suggestions

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SJ points : 20

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.5 Are historic rates of sea level defined?

You answered:

✓ Yes

 **CRS Suggestions**

Section 340: Hazard Disclosure: To disclose a property's potential flood hazard to potential buyers before the lender notifies them of the need for flood insurance.

- **Disclosure of Other Hazards (DOH):** Up to 8 points if the notification to prospective buyers includes disclosure of other flood related hazards, such as erosion, subsidence, or wetlands.

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **Higher Study Standards (HSS):** Up to 160 points if the new study was done to one or more standards higher than the FEMA mapping criteria.
-

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.5.1 **Has your community seen sea level rise impacts? How? (increased coastal flooding frequency/intensity, reverse flow in stormwater systems, planning activities according to tidal cycles, etc)**

You answered:

✓ **Yes**

The frequency and severity of flooding has increased.

No recommendations

1.6 **Are conditions defined that could amplify the impact of a hazard, like storm surge inundation at high tide or erosion rates on stabilized shorelines?**

You answered:

✓ **Yes**

 **CRS Suggestions**

Section 340: Hazard Disclosure: To disclose a property's potential flood hazard to potential buyers before the lender notifies them of the need for flood insurance.

- **Disclosure of Other Hazards (DOH):** Up to 8 points if the notification to prospective buyers includes disclosure of other flood related hazards, such as erosion, subsidence, or wetlands.

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.3.a. For each participating jurisdiction, the plan must describe the potential impacts of each of the identified hazards on the community.

1.7 **Are maps used to define the spatial extent of coastal hazards?**

You answered:

✓ Yes



CRS Suggestions

Section 320: Map Information Service: To provide inquirers with information about the local flood hazard and about flood-prone areas that need special protection because of their natural functions.

- **Basic Firm Information (MI1):** 30 points for providing basic information found on a FIRM that is needed to accurately rate a flood insurance policy.
- **Additional Firm Information (MI2):** 20 points for providing information that is shown on most FIRMS, such as protected coastal barriers, floodways, or lines demarcating wave action.
- **Problems Not Shown on the FIRM (MI3):** Up to 20 points for providing information about flood problems other than those shown on the FIRM.

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **New Study (NS):** Up to 290 points for new flood studies that produce base flood elevations or floodways.
- **Higher Study Standards (HSS):** Up to 160 points if the new study was done to one or more standards higher than the FEMA mapping criteria.
- **Floodplain mapping of special flood-related hazards (MAPSH):** Up to 50 points if the community maps and regulates areas of special flood related hazards.

Section 440: Flood Data Maintenance: The community must maintain all copies of Flood Insurance Rate Maps issued for that community.

- **Additional Map Data (AMD):** Up to 160 points for implementing digital or paper systems that improve access, quality, and/or ease of updating flood data within the community.
- **FIRM Maintenance (FM):** Up to 15 points for maintaining copies of all FIRMs that have been issued for the community.

Section 610: Flood Warning and Response: As part of a program including a community Flood Threat Recognition System, Early Warning Dissemination, Implementation of specific tasks to reduce or prevent threats to health, safety, and property.

- **Flood Threat Recognition System (FTR):** Up to 75 points for a system that predicts flood elevations and arrival times at specific locations within the community.

CRS points : 820



Sustainable Jersey Suggestions

Climate Adaptation: Flooding Risk (20 points)

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This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SI points : 20

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.3.b. The plan must provide an overall summary of each jurisdiction's vulnerability to the identified hazards. The overall summary of vulnerability identifies structures, systems, populations or other community assets as defined by the community that are susceptible to damage and loss from hazard events. A plan will meet this sub-element by addressing the requirements described in §201.6(c)(2)(ii)(A-C).

1.7.1 Flood Insurance Rate Maps (FIRMs)

You answered:

✓ Yes

No recommendations

1.7.2 Sea, Lake, and Overland Surges from Hurricanes (SLOSH)

You answered:

✓ Yes

No recommendations

1.7.3 Shoreline Change Analysis

You answered:

✓ Yes

No recommendations

1.7.4 Cumulative Risk Assessment

You answered:

✓ Yes

No recommendations

1.7.5 Sea Level Rise Inundation Maps

You answered:

Yes

No recommendations

1.7.6 The Nature Conservancy Restoration Explorer

You answered:

Yes

No recommendations

1.8 **Are municipal planners, public works, and emergency managers capable of accessing and using the following risk mapping tools?**

You answered:

Yes

No recommendations

1.8.1 Flood Insurance Rate Maps (FIRMs)

You answered:

Yes

No recommendations

1.8.2 Sea, Lake and Overland Surges from Hurricanes (SLOSH)

You answered:

Yes

No recommendations

1.8.3 Shoreline Change Analysis

You answered:

No

No recommendations

1.3.4 **Cumulative Risk Assessment**

You answered:

✓ Yes

No recommendations

1.3.5 **Sea Level Rise Inundation Maps**

You answered:

✓ Yes

No recommendations

1.8 **Are emergency managers and planners aware of potential flooding extents and heights in the community?**

You answered:

✓ Yes

Sustainable Jersey Suggestions

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SJ points : 20

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.0.1 **1% flood (SFHA of 100 year floodplain)**

You answered:

✓ Yes

No recommendations

1.9.2 **0.2% flood (500 year floodplain)**

You answered:

✓ Yes

No recommendations

1.9.3 **Category 1, 2, and 3 hurricane storm surge (SLOSH models)**

You answered:

✓ Yes

No recommendations

1.10 **Are emergency managers and planners aware of potential storm surge heights in the community?**

You answered:

✓ Yes

Sustainable Jersey Suggestions

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SJ points : 20

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.11 Are local planners, emergency managers, and public works officials aware of the location of repetitive loss?

You answered:

✓ Yes

CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Repetitive Loss Area Analysis (RLAA):** Up to 140 points for a detailed mitigation plan for a repetitive loss area.

Section 520: Acquisition & Relocation of buildings: To encourage communities to acquire, relocate, or otherwise clear existing buildings out of the flood hazard area .

- Up to 2,250 points based on the number of buildings that fit the criteria and have been acquired or relocated.

CRS points : 2,390

Hazard Mitigation Suggestions

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-7 Improve Flood Risk Assessment

(FEMA Resources/Publications FEMA 416 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1850>, 467-1 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1727>, B-797 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4271>)

Heighten awareness of flood risk with the following: ** Conducting a verification study of FEMA's repetitive loss inventory and developing an associated tracking database.

F-9 Manage the Floodplain Beyond Minimum Requirements

(FEMA Resources/Publications FEMA 100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>, 209 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1726>, 213 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1636>, 268 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>, 480 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1443>; FIA-15A <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1741>)

In addition to participation in NFIP, implementing good floodplain management techniques that exceed minimum requirements can help minimize flood losses. Examples include:

- Annually notifying the owners of repetitive loss properties of Flood Mitigation Assistance funding.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.12 **Does the municipality participate in the National Flood Insurance Program?**

You answered:

✓ Yes

 **CRS Suggestions**

Participation in the National Flood Insurance Program is a requirement to participate in CRS.


CRS points : 2,390

 **Hazard Mitigation Suggestions**

1.12.1 **Does the municipality track repetitive loss properties within the National Flood Insurance Program?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Repetitive Loss Area Analysis (RLAA):** Up to 140 points for a detailed mitigation plan for a repetitive loss area.

Section 520: Acquisition & Relocation of buildings: To encourage communities to acquire, relocate, or otherwise clear existing buildings out of the flood hazard area.

- Up to 2,250 points based on the number of buildings that fit the criteria and have been acquired or relocated.

Hazard Mitigation Suggestions

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-7 Improve Flood Risk Assessment

(FEMA Resources/Publications FEMA
416 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1850>, 467-
1 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1727>, B-
797 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4271>)

Heighten awareness of flood risk with the following: •• Conducting a verification study of FEMA's repetitive loss inventory and developing an associated tracking database.

F-9 Manage the Floodplain Beyond Minimum Requirements

(FEMA Resources/Publications FEMA
100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>,
209 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1726>,
213 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1636>,
268 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>,
480 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1443>; FIA-
15A <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1741>)

In addition to participation in NFIP, implementing good floodplain management techniques that exceed minimum requirements can help minimize flood losses. Examples include:

•• Annually notifying the owners of repetitive loss properties of Flood Mitigation Assistance funding.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.4. The plan must describe the types (residential, commercial, institutional, etc.) and estimate the numbers of repetitive loss properties located in identified flood hazard areas. Repetitive loss properties are those for which two or more losses of at least \$1,000 each have been paid under the National Flood Insurance Program (NFIP) within any 10-year period since 1978. Severe repetitive loss properties are residential properties that have at least four NFIP payments over \$5,000 each and the cumulative amount of such claims exceeds \$20,000, or at least

two separate claims payments with the cumulative amount exceeding the market value of the building.

1.12.2 **Has your community mapped repetitive loss/severe repetitive loss in relationship to other risks for internal use? i.e. sea level rise maps and storm surge maps**

You answered:

✓ Yes

 **CRS Suggestions**

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Repetitive Loss Area Analysis (RLAA):** Up to 140 points for a detailed mitigation plan for a repetitive loss area.

1.12.3 **Has your community completed a repetitive loss area analysis?**

You answered:

✗ No

 **Things to Consider**

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Repetitive Loss Area Analysis (RLAA):** Up to 140 points for a detailed mitigation plan for a repetitive loss area.

1.12.4 **Have you used this information to inform mitigation strategies and zoning decisions?**

You answered:

✓ Yes

No recommendations

1.15 **Has your community used maps to compare vulnerabilities in relationship to risks?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 450: Stormwater Management: To prevent future development from increasing flood hazards to existing development and to maintain and improve water quality.

- **Watershed Master Plan (WMP):** Up to 315 points for regulating development according to a watershed management master plan (WMP).

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain Management Planning (FMP):** 382 for a community-wide flood plain.
- **Repetitive Loss Area Analysis (RLAA):** Up to 140 points for a detailed mitigation plan for a repetitive loss area.
- **Natural Floodplains Function Plan (NFP):** 100 points for adopting plans that protect one or more natural functions within the community's floodplain.

CRS points : 937

 **Sustainable Jersey Suggestions**

Climate Adaptation: Flooding Risk (20 points)

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SI points : 20

 **Hazard Mitigation Suggestions**

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

Element B.2.b. The plan must include the probability of future events for each identified hazard. Probability means the likelihood of the hazard occurring and may be defined in terms of general descriptors (for example, unlikely, likely, highly likely), historical frequencies, statistical probabilities (for example: 1% chance of occurrence in any given year), and/or hazard probability maps. If general descriptors are used, then they must be defined in the plan. For example, "highly likely" could be defined as equals near 100% chance of occurrence next year or happens every year.

Element C.2.a. The plan must describe each jurisdiction's participation in the NFIP and describe their floodplain management program for continued compliance. Simply stating "The community will continue to comply with NFIP," will not meet this requirement.

The description could include, but is not limited to:

-Adoption and enforcement of floodplain management requirements, including regulating

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new construction in Special Flood Hazard Areas (SFHAs);

-Floodplain identification and mapping, including any local requests for map updates

1.13.1 **Populations, e.g. elderly, children, poor, disabled, linguistically isolated**

You answered:

✓ Yes

No recommendations

1.13.2 **Buildings, e.g. business and residential**

You answered:

✓ Yes

No recommendations

1.13.3 **Infrastructure, e.g. roads, schools, wastewater treatment facilities, hospitals, public works**

You answered:

✓ Yes

No recommendations

1.13.4 **Natural Resources, e.g. freshwater wetlands, forests, beaches**

You answered:

✓ Yes

No recommendations

1.13.5 **Historical and Cultural Resources, e.g. historic districts, properties, libraries, museums, and landmarks**

You answered:

✓ Yes

No recommendations

1.13.6 **Economic Resources, e.g. major employers**

You answered:

✓ Yes

No recommendations

1.14

Does the community have homes or businesses that are within the A or V-zone?

You answered:

✓ Yes

 **CRS Suggestions**

Section 210: Requesting CRS Credit

- **Class 1 Prerequisites:** To be eligible for Class 1 CRS status, communities must receive credit for using regulatory flood elevations in the V zones and coastal A zones.

Section 310: Elevation Certificates: To maintain correct federal emergency management agency (FEMA) Elevation Certificates and other needed certifications for new and substantially improved buildings in the Special Flood Hazard Area (SFHA).

- **Maintaining Elevation Certificates (EC):** Up to 38 points for maintaining FEMA elevation certificates on all buildings built in the special SFHA after the date of application to the CRS. All communities applying to the CRS must apply for this element.
- **Maintaining Elevation Certificates for Post-FIRM Buildings (ECPO):** Up to 48 points for maintaining EC on buildings built before the date of application to the CRS but after the initial date of the FIRM.
- **Maintaining Elevation Certificates for Pre-FIRM Buildings (ECPR):** Up to 30 points for maintaining elevation certificates on buildings built before the initial date of the FIRM.

Section 340: Hazard Disclosure: To disclose a property's potential flood hazard to potential buyers before the lender notifies them of the need for flood insurance.

- **Disclosure of Other Hazards (DOH):** Up to 8 points if the notification to prospective buyers includes disclosure of other flood-related hazards, such as erosion, subsidence, or wetlands.

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain development.

- **New Study (NS):** Up to 290 points for new flood studies that produce base flood elevations or floodways.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program.

- **Freeboard (FRB):** Up to 500 points for a freeboard requirement.
- **Foundation Protection (FDN):** Up to 80 points for engineered foundations.
- **Coastal A Zones (CAZ):** Up to 650 points for enforcing V Zone rules or ENL inland from the V zone boundary.

CRS points : 1,644

 **Sustainable Jersey Suggestions**

Climate Adaptation: Flooding Risk (20 points)

This Sustainable Jersey action, under the category of "Climate Adaptation," is designed to help communities identify: 1) your community's vulnerability to flooding impacts (both coastal and inland) and 2) ways to improve your community's overall resiliency. This action focuses on the various causes of flooding that could impact a community, either now or in the future, including increased precipitation, increased frequency of heavy precipitation events, sea level rise and storm surge. Completion of this action item will count for a total of 20 points and will serve as a prerequisite for future companion Sustainable Jersey actions related to flooding and resiliency.

SI points : 20

 **Hazard Mitigation Suggestions**

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

Element B.2.b. The plan must include the probability of future events for each identified hazard. Probability means the likelihood of the hazard occurring and may be defined in terms of general descriptors (for example, unlikely, likely, highly likely), historical frequencies, statistical probabilities (for example: 1% chance of occurrence in any given year), and/or hazard probability maps. If general descriptors are used, then they must be defined in the plan. For example, "highly likely" could be defined as equals near 100% chance of occurrence next year or happens every year.

Element C.2.a. The plan must describe each jurisdiction's participation in the NFIP and describe their floodplain management program for continued compliance. Simply stating "The community will continue to comply with NFIP," will not meet this requirement. The description could include, but is not limited to:

- Adoption and enforcement of floodplain management requirements, including regulating new construction in Special Flood Hazard Areas (SFHAs)
- Floodplain identification and mapping, including any local requests for map updates

1.15 **Has the municipality developed a build-out analysis using existing zoning ordinances?**

You answered:
 Yes

No recommendations

1.15.1 **If so, has the build-out analysis been compared to the extent of storm surge scenarios?**

You answered:
 Yes

No recommendations

1.15.2 **Has the build-out analysis been compared to various sea level rise scenarios?**

You answered:

✓ Yes

No recommendations

1.16

Have municipal employees utilized any of the following vulnerability assessment methodologies?

- **Community Vulnerability Assessment Tool (CVAT)**
- **Hazard Assessment Tool**
- **HAZUS-MH**

You answered:

✓ Yes

CRS Suggestions

Section 440: Flood Data Maintenance: Points awarded for maintaining coastal erosion data as described in CRS Credit for Management of Coastal Erosion Hazards.

- **Additional Map Data (AMD):** 8 points for other overlays or databases used for regulation or mitigation programs, including incorporating or maintaining layers from HAZUS-MH and the communities repetitive loss areas.

CRS points : 8

Hazard Mitigation Suggestions

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

Element A.4.a. The plan must document what existing plans, studies, reports, and technical information were reviewed. Examples of the types of existing sources reviewed include, but are not limited to, the state hazard mitigation plan, local comprehensive plans, hazard specific reports, and flood insurance studies.

Element A.4.b. The plan must document how relevant information was incorporated into the mitigation plan.

1.17

Are municipal employees trained in the use of FEMA's HAZUS-MH?

You answered:

✓ Yes

No recommendations

1.18

Do any plans describe the damage and cost of previous storms, floods, or erosion?

You answered:

✓ Yes

No recommendations

1.19 **Do any plans estimate future financial losses that may result from flooding?**

You answered:

Yes

No recommendations

1.19.1 **Storm events?**

You answered:

Yes

No recommendations

1.19.2 **Sea level rise?**

You answered:

Yes

No recommendations

1.19.3 **Sea level rise plus storm events?**

This has not been answered

1.20 **Have risk and vulnerability assessments been shared with municipal planners, public works officials, transportation planners, and other appropriate municipal, county, or state officials beyond a multi-jurisdictional hazard mitigation plan?**

You answered:

Yes

No recommendations

Public Engagement

2.1 **Is the community active in the National Flood Insurance Program's Community Rating System**

You answered:

No

No recommendations

2.2 Does the community have a Program for Public Information (PPI) that is responsible for outreach materials?

You answered:

✓ Yes

CRS Suggestions

Section 330: Public outreach: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.
- **Program for Public Information (PPI):** Up to 80 points added to OP credits and up to 20 points added to FRP credits, for projects that are designed and implemented as part of an overall public information program.
- **Stakeholder delivery (STK):** Up to 50 points added to OP credits for having information disseminated by people or groups from outside the local government.

2.2.1 Is the PPI CRS approved?

You answered:

✗ No

Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 330: Public outreach: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.
- **Program for Public Information (PPI):** Up to 80 points added to OP credits and up to 20 points added to FRP credits, for projects that are designed and implemented as part of an overall public information program.
- **Stakeholder delivery (STK):** Up to 50 points added to OP credits for having information disseminated by people or groups from outside the local government.

2.2.2 Is the PPI multi-jurisdictional?

You answered:

✘ No

Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 330: Public outreach: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.
- **Program for Public Information (PPI):** Up to 80 points added to OP credits and up to 20 points added to FRP credits, for projects that are designed and implemented as part of an overall public information program.
- **Stakeholder delivery (STK):** Up to 50 points added to OP credits for having information disseminated by people or groups from outside the local government.

2.3 Has the community involved the public in the identification and documentation of historic storm impacts, such as storm surge elevations, flood-prone streets, beach erosion and overwash, and property loss? ex. participatory mapping, surveying, focus groups, etc

You answered:

✔ Yes

CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Repetitive Loss Area Analysis (RLAA):** Up to 140 points for a detailed mitigation plan for a repetitive loss area.

Section 440: Flood Data Maintenance: The community must maintain all copies of Flood Insurance Rate Maps issued for that community

- **Erosion Data Maintenance (EDM):** Up to 20 points awarded for maintaining coastal erosion data as described in CRS Credit for Management of Coastal Erosion Hazards.

CRS points : 160

 Sustainable Jersey Suggestions

Community Education and Outreach (10 points)

This action promotes sustainability literacy and builds awareness, understanding, and action by educating municipal staff, residents, and the business and non-profit sectors of the community about the need for sustainable choices and behaviors. In addition to promoting action outside of local government, it can build support within the community for local government to take bolder steps. Municipalities may earn 10 points toward Sustainable Jersey certification for having an active and ongoing education and outreach program that incorporates one or more of the activities outlined in this action. A program is defined as more than one event.

SI points : 10

 Hazard Mitigation Suggestions

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

Element A.5.a. The plan must describe how the jurisdiction(s) will continue to seek public participation after the plan has been approved and during the plan's implementation, monitoring and evaluation.

2/4

Has the community installed publicly visible high water mark signs or storm surge elevation signs?

You answered:**✘ No**

 **Things to Consider**

Severe flooding is part of the history of many communities in the southeast United States. Despite this reality, many residents are not fully aware of the flood potential in their area. To help raise awareness of flood risk, NWS began a project in 2006 to install High Water Mark signs in prominent locations within communities that have experienced severe flooding. Locations are selected based more on visibility than location of the flood. For example, a sign might be placed on the wall of a building downtown rather than near a rarely visited riverbank. To view the National Weather Service's High-Water marking Toolkit, click [here](#). Click [here](#) for an example of a community that has implemented this project successfully.

Inland communities that experience frequent river, creek, or road flooding could also consider a High Water signage campaign to make communities aware of potential risks.

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 320: Map Information Service: To provide inquirers with information about the local flood hazard and about flood-prone areas that need special protection because of their natural functions.

- **Historic Flood Information (MI6):** 20 points for providing information about past flooding at or near the site in question

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-7 Improve Flood Risk Assessment

(FEMA Resources/Publications FEMA 416 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1850>, 467-1 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1727>, B-797 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4271>)

Heighten awareness of flood risk with the following:

- Incorporating the procedures for tracking high water marks following a flood into emergency response plans.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

2.5 **Has the community held meetings to discuss natural hazard vulnerability with the public?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs

- **Floodplain Management Planning (FMP):** Up to 382 points for a community wide FMP that follows a 10 step planning process. Step 2 is to involve the public.

CRS points : 382

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.5.a. The plan must describe how the jurisdiction(s) will continue to seek public participation after the plan has been approved and during the plan's implementation, monitoring and evaluation.

2.6 **Does the community provide the public with information on the natural and beneficial functions of floodplains?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 330: Public outreach: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.
- **Program for Public Information (PPI):** Up to 80 points added to OP credits and up to 20 points added to FRP credits, for projects that are designed and implemented as part of an overall public information program.
- **Stakeholder delivery (STK):** Up to 50 points added to OP credits for having information disseminated by people or groups from outside the local government.

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain Management Planning (FMP):** Up to 382 points for a community wide FMP that follows a 10 step planning process.

CRS points : 762

 **Sustainable Jersey Suggestions**

Community Education and Outreach (10 points)

This action promotes sustainability literacy and builds awareness, understanding, and action by educating municipal staff, residents, and the business and non-profit sectors of the community about the need for sustainable choices and behaviors. In addition to promoting action outside of local government, it can build support within the community for local government to take bolder steps. Municipalities may earn 10 points toward Sustainable Jersey certification for having an active and ongoing education and outreach program that incorporates one or more of the activities outlined in this action. A program is defined as more than one event.

SJ points : 10

2.6.1 **website?**

You answered:

✓ **Yes**

No recommendations

2.6.2 **town hall?**

You answered:

✓ **Yes**

No recommendations

2, 6, 3 **library?****You answered:**

✓ Yes

No recommendations

2, 7 **Does the municipality provide residents and visitors access to floodplain maps?****You answered:**

✓ Yes

 **CRS Suggestions**

Section 320: Map Information Service: To provide inquirers with information about the local flood hazard and about flood-prone areas that need special protection because of their natural functions.

- **Basic Firm Information (MI1):** 30 points for providing basic information found on a FIRM that is needed to accurately rate a flood insurance policy.
- **Additional Firm Information (MI2):** 20 points for providing information that is shown on most FIRMS, such as protected coastal barriers, floodways, or lines demarcating wave action.
- **Problems Not Shown on the FIRM (MI3):** Up to 20 points for providing information about flood problems other than those shown on the FIRM.

Section 410: Floodplain Mapping: To improve the quality of the mapping that is used to identify and regulate floodplain management.

- **Floodplain mapping of special flood-related hazards (MAPSH):** Up to 50 points if the community maps and regulates areas of special flood related hazards.

Section 440: Flood Data Maintenance: The community must maintain all copies of Flood Insurance Rate Maps issued for that community.

- **Additional Map Data (AMD):** Up to 160 points for implementing digital or paper systems that improve access, quality, and/or ease of updating flood data within the community.
- **FIRM Maintenance (FM):** Up to 15 points for maintaining copies of all FIRMs that have been issued for the community.

CRS points : 295

 **Sustainable Jersey Suggestions**

Natural Resource Inventory (20 points)

The Natural Resource Inventory (NRI), also known as an Environmental Resource Inventory (ERI), serves as an index of natural resources and is a compilation of text and visual information about the natural resource characteristics and environmental features of an area. It provides baseline documentation for measuring and evaluating resource protection issues. The NRI is an important tool for environmental commissions, planning boards, and zoning boards of adjustment. A municipality will earn 20 points toward


Sustainable Jersey certification for a Natural Resource Inventory completed from within 10 years of the June submission deadline or for an older Inventory that has been reviewed and updated from within 10 years of the June submission deadline.

SJ points : 20

2.7.1 **Does the municipality publicize the availability of floodplain information to property owners and businesses?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and to protect the natural functions of flood plains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).

Section 350: Flood Protection Information: To provide more detailed flood information than that provided by outreach products.

- **Flood protection library (LIB):** 10 points for having 10 Federal Emergency Management Agency publications on flood protection topics housed in the public library.
- **Locally pertinent documents (LPD):** Up to 10 points for having additional references on the community's flood problem or local or state floodplain management programs housed in the public library.
- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

CRS points : 592

2.7.2 **Does the municipality publicize the availability of floodplain information to insurance agents, real estate agents and lenders?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 330: Outreach Projects: to provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and to protect the natural functions of flood plains.

Linkages

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).

Section 340: Hazard Disclosure: To disclose a property's potential flood hazard to prospective buyers before the lender notifies them of the need for flood insurance.

- **Disclosure of the flood hazard (DFH):** Up to 25 points if real estate agents notify those interested in purchasing properties located in the Special Flood Hazard Area (SFHA) about the flood hazard and the flood insurance purchase requirement. An additional 10 points are provided if the disclosure program is part of a Program for Public Information credited under Activity 330 (Outreach Projects).
- **Other disclosure requirements (ODR):** Up to 5 points for each other method of flood hazard disclosure required by law, up to a maximum of 25 points.
- **Real estate agents' brochure (REB):** Up to 8 points if real estate agents are providing brochures or handouts that advise potential buyers to investigate the flood hazard for a property. An additional 4 points are provided if the disclosure program is part of a Program for Public Information credited in Activity 330 (Outreach Projects).
- **Disclosure of other hazards (DOH):** Up to 8 points if the notification to prospective buyers includes disclosure of other flood-related hazards, such as erosion, subsidence, or wetlands.

Section 350: Flood Protection Information: To provide more detailed flood information than that provided by outreach products.

- **Flood protection library (LIB):** 10 points for having 10 Federal Emergency Management Agency publications on flood protection topics housed in the public library.
- **Locally pertinent documents (LPD):** Up to 10 points for having additional references on the community's flood problem or local or state floodplain management programs housed in the public library.
- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

CRS points : 642

2.3

Does the community require floodplain information to be shared by insurance agents, real estate agents and lenders?

You answered:

✓ Yes

No recommendations

2.3

Does the community have a local hazard disclosure policy?

You answered:

✓ Yes

 **CRS Suggestions**

Section 340: Hazard Disclosure: To disclose a property's potential flood hazard to prospective buyers before the lender notifies them of the need for flood insurance.

- **Disclosure of the flood hazard (DFH):** Up to 25 points if real estate agents notify those interested in purchasing properties located in the Special Flood Hazard Area (SFHA) about the flood hazard and the flood insurance purchase requirement. An additional 10 points are provided if the disclosure program is part of a Program for Public Information credited under Activity 330 (Outreach Projects).
- **Other disclosure requirements (ODR):** Up to 5 points for each other method of flood hazard disclosure required by law, up to a maximum of 25 points.
- **Real estate agents' brochure (REB):** Up to 8 points if real estate agents are providing brochures or handouts that advise potential buyers to investigate the flood hazard for a property. An additional 4 points are provided if the disclosure program is part of a Program for Public Information credited in Activity 330 (Outreach Projects).
- **Disclosure of other hazards (DOH):** Up to 8 points if the notification to prospective buyers includes disclosure of other flood-related hazards, such as erosion, subsidence, or wetlands.

CRS points : 80

2,10

Does the community conduct outreach to floodplain residents at least once a year?

You answered:

✘ No

 **Things to Consider**

Informative Resources:

- Association of State Floodplain Managers - [Outreach Library](#)
- National Weather Service: Office of Climate, Water, and Weather service [Publications/Brochures/Booklets/Posters and more](#)
- ANJEC's [Water Resources - Reducing Environmental Impacts of Flooding – Local Advice for Businesses and Residents in Flood Areas](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier,
- **Program for Public Information (PPI):** Up to 80 points added to OP credits and up to 20 points added to FRP credits, for projects that are designed and implemented as

Linkages

part of an overall public information program.

- **Stakeholder delivery (STK):** Up to 50 points added to OP credits for having information disseminated by people or groups from outside the local government.

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community’s website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

Communities working towards Sustainable Jersey Certification should consider the following actions.

Community Education and Outreach (10 points)

This action promotes sustainability literacy and builds awareness, understanding, and action by educating municipal staff, residents, and the business and non-profit sectors of the community about the need for sustainable choices and behaviors. In addition to promoting action outside of local government, it can build support within the community for local government to take bolder steps. Municipalities may earn 10 points toward Sustainable Jersey certification for having an active and ongoing education and outreach program that incorporates one or more of the activities outlined in this action. A program is defined as more than one event.

2.10.1 Website

You answered:

✔ Yes

No recommendations

2.10.2 Brochures/Newsletters

You answered:

✔ Yes

No recommendations

2.10.3 Community Meetings

You answered:

✔ Yes

No recommendations

2.10.4 Television or Radio

You answered:

✘ No

No recommendations

3,10,5 Other

You answered:

✘ No

No recommendations

3,11 **Does the community conduct storm preparedness outreach to floodplain residents at least once a year?**

You answered:

✘ No

! Things to Consider

Informative Resources:

- National Weather Service: Office of Climate, Water, and Weather service [Publications/Brochures/Booklets/Posters and more](#)
- Ready - Information on [Natural Disasters](#)
- Ready - [Public Service Announcements and Multimedia](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.
- **Program for Public Information (PPI):** Up to 80 points added to OP credits and up to 20 points added to FRP credits, for projects that are designed and implemented as part of an overall public information program.
- **Stakeholder delivery (STK):** Up to 50 points added to OP credits for having information disseminated by people or groups from outside the local government.

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects).

Linkages

Communities working towards Sustainable Jersey Certification should consider the following actions.

Community Education and Outreach (10 points)

This action promotes sustainability literacy and builds awareness, understanding, and action by educating municipal staff, residents, and the business and non-profit sectors of the community about the need for sustainable choices and behaviors. In addition to promoting action outside of local government, it can build support within the community for local government to take bolder steps. Municipalities may earn 10 points toward Sustainable Jersey certification for having an active and ongoing education and outreach program that incorporates one or more of the activities outlined in this action. A program is defined as more than one event.

2.11.1 **Website**

You answered:

✘ No

No recommendations

2.11.2 **Brochures/Newsletters**

You answered:

✘ No

No recommendations

2.11.3 **Community meetings**

You answered:

✘ No

No recommendations

2.11.4 **Television or Radio**

You answered:

✘ No

No recommendations

2.11.5 **Other**

You answered:

✘ No

No recommendations

2,12

Does the community provide residents with guidance on the development of Personal or Family Evacuation Plans?**You answered:**

✓ Yes

 **CRS Suggestions**

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

Section 430- Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Other higher standard (OHS):** Up to 100 points for other regulations.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **Emergency warning dissemination (EWD):** Up to 75 points for disseminating flood warnings to the public.
- **Flood response operations (FRO):** Up to 115 points with 10 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a flood warning is issued and for having a plan to provide transportation to secure locations.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure warning (LFW):** Up to 50 points for disseminating the warning to the public.
- **Levee failure response operations (LFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a levee failure warning is issued and for having a plan to provide transportation to secure locations.

Linkages

Section 630: Dams: To encourage states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

- **Dam failure warning (DFW):** Up to 35 points for disseminating the warning to the public.
- **Dam failure response operations (DFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a dam failure warning is issued, and for having a plan to provide transportation to secure locations.

CRS points : 635

2.13

Does the community provide property owners information on what to include in an At-Home Emergency Kit, Emergency Supplies, and/or an Evacuation Kit?

You answered:

No

 **Things to Consider**

Informative Resources:

- Ready - [Disaster Supplies Kit](#)
- Ready - [Family Supply List](#)
- Ready - [Emergency Supply List](#)
- NJ Office of Emergency Management - Plan and Prepare: [Your Kit/Your Plan](#)
- NJ Office of Emergency Management - [A Family Preparedness Guide](#)

2.14

Does the municipality provide residents with the following information prior to the threat of a storm?

You answered:

Yes

 **CRS Suggestions**

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

Section 430- Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Other higher standard (OHS):** Up to 100 points for other regulations

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **Emergency warning dissemination (EWD):** Up to 75 points for disseminating flood warnings to the public.
- **Flood response operations (FRO):** Up to 115 points with 10 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a flood warning is issued and for having a plan to provide transportation to secure locations.
- **Critical facilities planning (CFP):** Up to 75 points for coordinating flood warning and response activities with operators of critical facilities.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure warning (LFW):** Up to 50 points for disseminating the warning to the public.
- **Levee failure response operations (LFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a levee failure warning is issued and for having a plan to provide transportation to secure locations.

Section 630: Dams: To encourage states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

- **Dam failure warning (DFW):** Up to 35 points for disseminating the warning to the public.
- **Dam failure response operations (DFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a dam failure warning is issued, and for having a plan to provide transportation to secure locations.

CRS points : 1205

Sustainable Jersey Suggestions

Sustainable Jersey offers credits for communities that offer broad Public Outreach and Education programming on sustainability issues. If flooding is a local issue for the community, offering programming on storm preparedness could be a topic included in the public outreach progra

You answered:

✔ Yes

No recommendations

2.14.2 **Evacuation Bus Pick-up Locations**

You answered:

✔ Yes

No recommendations

2.14.3 **Location of Severe Weather Shelters**

You answered:

✔ Yes

No recommendations

2.14.4 **Location of Pet Shelters**

You answered:

✔ Yes

No recommendations

2.15 **Does the community conduct outreach regarding New Jersey's special needs registry for disasters, Register Ready, on a yearly basis?**

You answered:

✘ No

! Things to Consider

This registration Web site allows residents with special needs and their families, friends and associates an opportunity to provide information to emergency response agencies, so emergency responders can better plan to serve them in a disaster or other emergency. For more information on NJ's Register Ready program, click [here](#).

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

Linkages

- **Flood response operations (FRO):** Up to 115 points with 10 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a flood warning is issued and for having a plan to provide transportation to secure locations.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure response operations (LFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a levee failure warning is issued and for having a plan to provide transportation to secure locations.

Section 630: Dams: To encourage states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

- **Dam failure response operations (DFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a dam failure warning is issued, and for having a plan to provide transportation to secure locations.

2,16,1

Does the municipality maintain and conduct outreach for it's own special needs database?

You answered:

✓ Yes

No recommendations

2,16

Does the municipality inform property owners of FEMA suggested means to protect their homes against hurricane and wind damage?

You answered:

✗ No

! Things to Consider

Download FEMA's Guide "[Against the Wind](#)", for a guide on protecting a home from hurricane and wind damage.

2,17

Does the municipality provide the public with flood mitigation information for homes?

You answered:

✗ No

 **Things to Consider**

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).

2,19

Does the municipality refer home builders to FEMA's Coastal Construction Manual?

You answered:

✓ Yes

 **CRS Suggestions**

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection library (LIB):** 10 points for having 10 Federal Emergency Management Agency publications on flood protection topics housed in the public library.

CRS points : 10

2,19

Does the community have staff available to discuss and assist the public on flood and storm related information?

You answered:

✓ Yes

 **CRS Suggestions**

Section 360: Flood Protection Assistance: To provide one-on-one help to people who are interested in protecting their property from flooding

- **Property protection advice (PPA):** Up to 25 points for providing one-on-one advice about property protection (such as retrofitting techniques and drainage improvements). An additional 15 points are provided if the assistance program is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).
- **Protection advice provided after a site visit (PPV):** Up to 30 points if the property protection advisor makes a site visit before providing the advice. An additional 15 points are provided if the site visit procedures are part of a Program for Public Information credited under Activity 330 (Outreach Projects).
- **Financial assistance advice (FAA):** 10 points for providing advice on financial assistance programs that may be available. An additional 5 points are provided if the

Linkages

financial assistance advisory service is part of a Program for Public Information credited under Activity 330 (Outreach Projects).

- **Advisor training (TNG):** 10 points if the person providing the advice has graduated from the EMI courses on retrofitting or grants programs.

Planning Integration

3.1 Does the municipality have a certified floodplain manager (CFM) on staff?

You answered:

No

Things to Consider

Informative Resources:

- Association of State Floodplain Mappers - [ASFPM Certified Floodplain Manager Program Information](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 430- Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

Regulations administration (RA): Up to 67 points for having trained staff and administrative procedures that meet specified standards.

3.1.1 Does the municipal master plan explain the support and involvement of emergency managers, floodplain managers, coastal managers, and public works officials?

You answered:

Yes

CRS Suggestions

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Linkages

Element C.1.a. The plan must describe each jurisdiction's existing authorities, policies, programs and resources available to accomplish hazard mitigation.

Element C.5.c. The plan must identify the position, office, department, or agency responsible for implementing and administering the action (for each jurisdiction), and identify potential funding sources and expected timeframes for completion.

Element C.6.c. A multi-jurisdictional plan must describe each participating jurisdiction's individual process for integrating hazard mitigation actions applicable to their community into other planning mechanisms.

Element C.6.d. The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts.

3.1.2 **Does the planning process documentation describe the review and incorporation, if appropriate, of existing plans, studies, reports, and technical information?**

For example:

- All Hazards Mitigation Plan
- Stormwater Management Plan
- Capital Improvement Plan

You answered:

✓ Yes

 **CRS Suggestions**

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Capital improvement program (CIP):** Up to 70 points for having a capital improvement program that corrects drainage problems.

CRS points : 70

 **Hazard Mitigation Suggestions**

Element A.5.a. The plan must describe how the jurisdiction(s) will continue to seek public participation after the plan has been approved and during the plan's implementation, monitoring and evaluation.

Element A.6.a. The plan must identify how, when, and by whom the plan will be monitored. Monitoring means tracking the implementation of the plan over time. For example, monitoring may include a system for tracking the status of the identified hazard mitigation actions.

Element A.6.b. The plan must identify how, when, and by whom the plan will be evaluated. Evaluating means assessing the effectiveness of the plan at achieving its stated purpose and goals.

Linkages

Element A.6.c. The plan must identify how, when, and by whom the plan will be updated. Updating means reviewing and revising the plan at least once every five years.

Element A.6.d. The plan must include the title of the individual or name of the department/ agency responsible for leading each of these efforts.

3.1.3 **Did the preparation of the municipal master plan involve a broad base of the community, such as public officials, civic organizations, businesses, and citizens?**

You answered:

✓ Yes

 **CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Master Plan may result in points elsewhere in the CRS.

3.1.4 **Does the municipal master plan provide a clear explanation of participation techniques used in its development?**

You answered:

✓ Yes

No recommendations

3.1.5 **Does the municipal master plan identify resilience within its mission vision, or goals?**

You answered:

✓ Yes

 **Sustainable Jersey Suggestions**

The Sustainable Jersey certification program offers credits to communities with a Sustainability Master Plan Revision, which entails adding a Green Building and Environmental Sustainability Element to the community's Municipal Master Plan.

Details for this Sustainable Jersey Action Item can be found [here](#).

Another action item for Sustainable Jersey related to municipal planning is a Sustainable Community Plan. Actions under the umbrella of the Sustainable

Linkages

Community Plan address a broad community planning process separate from the municipal Master Plan that directs the future development of the municipality. A Master Plan typically focuses on issues related to land use, while a Sustainable Community Plan may include actions related to energy use or influencing individual behaviors. Although the Sustainable Community Plan tracks a variety of conditions and guides actions to improve those conditions, it may also include elements regarding community development.

Details for this Sustainable Jersey Action Item can be found [here](#).

3.1.6 **Are hazards addressed in the municipal master plan as individual elements?**

You answered:

✓ Yes

No recommendations

3.1.7 **Are hazards addressed among the elements of the municipal master plan?**

You answered:

✓ Yes

No recommendations

3.1.8 **Does the plan identify potential coastal hazard impacts on infrastructure, land uses, housing and community facilities?**

You answered:

✓ Yes

No recommendations

3.1.9 **Does the plan make recommendations to reduce hazard vulnerability through land use planning?**

You answered:

✓ Yes

No recommendations

3.1.10 **Does the plan identify how often it should be updated? (6 years)**

You answered:

✓ Yes

No recommendations

3.2 **Does the municipality have a licensed professional planner on staff?**

You answered:

✓ Yes

No recommendations

3.2, f **Are frequently flooded areas protected through conservation easements or dedicated to open space, parks and/or recreational uses?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process: Step 7d - 5 points, if the plan reviews activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection.

CRS points : 382

3.2.2 **Does the community use subdivision regulations to ensure low densities within the floodplain?**

You answered:

✗ No

 **Things to Consider**

The Sustainable Jersey certification program offers points toward certification for a community having a Sustainable Land Use Pledge. The Sustainable Land Use Pledge is a public affirmation of a municipality's intent to support sustainable smart growth land-use policies. This tool provides a model resolution to be adopted by a municipality as a first step towards community sustainability. The adoption of the resolution commits the municipality to a

Details about this Sustainable Jersey action item can be found [here](#).

Another action item toward Sustainable Jersey certification is a Clustering Ordinance. The Clustering Ordinance action is one of four actions that can earn

a community points toward Natural Resource Protection Ordinance. Residential cluster development is a form of land development in which principal buildings and structures are grouped together on a site, thus saving the remaining land area for common open space, conservation, agriculture, recreation or public and semi-public uses.

Details about this Sustainable Jersey action item can be found [here](#).

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Special flood-related hazards open space (SHOS):** Up to 50 points if the OSP credited parcels are subject to one of the special flood-related hazards or if areas of special flood related hazard are covered by low density zoning regulations.
- **Open space incentives (OSI):** Up to 250 points for local requirements and incentives that keep flood-prone portions of new development open.
- **Low-density zoning (LZ):** Up to 600 points for zoning districts that require lot sizes of 5 acres or larger.

3,2,3

Does the community have a local ordinance to protect dunes, bluffs, or eroding cliffs from development or disturbance?

You answered:

✘ No

📌 Things to Consider

Informative Resources:

- ANJEC - [Sample Ordinances for Protecting Significant Coastal Habitats](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Coastal A Zones (CAZ):** Up to 650 points with 25 points awarded if the community prohibits human alteration of any sand dunes or mangroves that would increase flood damage (§60.3(e)(7)). These points are available only if the designated areas include sand dunes or mangroves.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Coastal erosion protection maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion-prone areas as described in CRS Credit for Management of Coastal Erosion Hazards.

Communities working towards Sustainable Jersey Certification should consider the following actions.

Natural Resource Protection Ordinances (10 points each)

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

3.2.4 Does the community have a local ordinance to protect wetlands?

You answered:

✓ Yes

CRS Suggestions

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.
- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.

Section 450: Stormwater Management: To prevent future development from increasing flood hazards to existing development and to maintain and improve water quality.

- **Watershed Master Plan (WMP):** Up to 315 points for regulating development according to a watershed management master plan (WMP) with 30 points if the plan identifies existing wetlands or other natural open space areas to be preserved from development so that natural attenuation, retention, or detention of runoff is provided.

CRS points : 1,830

Sustainable Jersey Suggestions

Natural Resource Protection Ordinances (10 points each)

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of

Linkages


the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

**SJ points : 10 points
each**

3.3 **Are local land use regulations and policies in place that reduce vulnerabilities to hazards?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.
- **Deed restrictions (DR):** Up to 50 points extra credit for legal restrictions that ensure that parcels credited for OPS will never be developed.
- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.
- **Special flood-related hazards open space (SHOS):** Up to 50 points if the OSP credited parcels are subject to one of the special flood-related hazards or if areas of special flood related hazard are covered by low density zoning regulations.
- **Open space incentives (OSI):** Up to 250 points for local requirements and incentives that keep flood-prone portions of new development open.
- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process: Step 7d - 5 points, if the plan reviews activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection.

CRS points : 2,652

 **Sustainable Jersey Suggestions**

Open Space Plans (10 points)

An Open Space and Recreation Plan, OSRP, (also referred to as the Open Space Plan, OSP) is a comprehensive document that guides municipal, county, and/or regional open space protection and preservation. The Plan tells how and why open space will be protected and provides a framework for implementation. An OSRP identifies and examines open space, recreation needs and other resources that are important to the municipality, and lays out a plan of action to protect and maintain these places.

SJ points : 10

3.3.1 Does the plan identify floodplain management as a priority?

You answered:

✔ Yes

 CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process: Step 7d - 5 points, if the plan reviews activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection.

CRS points : 382

3.3.2 Are managed lands maintained in a manner that provides flood protection?

You answered:

✔ Yes

 CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process.

CRS points : 382

3.3.3 Is the plan adopted as part of the municipal master plan?

You answered:

✔ Yes

Sustainable Jersey Suggestions

Open Space Plans (10 points)

An Open Space and Recreation Plan, OSRP, (also referred to as the Open Space Plan, OSP) is a comprehensive document that guides municipal, county, and/or regional open space protection and preservation. The Plan tells how and why open space will be protected and provides a framework for implementation. An OSRP identifies and examines open space, recreation needs and other resources that are important to the municipality, and lays out a plan of action to protect and maintain these places.

SJ points : 10

3.4

Are subdivision regulations used to restrict the subdivision of land within or adjacent to high-hazard areas?

You answered:

✘ No

📌 Things to Consider

The Sustainable Jersey certification program offers points toward certification for a community having a Sustainable Land Use Pledge. The Sustainable Land Use Pledge is a public affirmation of a municipality's intent to support sustainable smart growth land-use policies. This tool provides a model resolution to be adopted by a municipality as a first step towards community sustainability. The adoption of the resolution commits the municipality to a

Details about this Sustainable Jersey action item can be found [here](#).

Another action item toward Sustainable Jersey certification is a Clustering Ordinance. The Clustering Ordinance action is one of four actions that can earn a community points toward Natural Resource Protection Ordinance. Residential cluster development is a form of land development in which principal buildings and structures are grouped together on a site, thus saving the remaining land area for common open space, conservation, agriculture, recreation or public and semi-public uses.

Details about this Sustainable Jersey action item can be found [here](#).

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- Special flood-related hazards open space (SHOS): Up to 50 points if the OSP credited parcels are subject to one of the special flood-related hazards or if areas of special flood related hazard are covered by low density zoning regulations.
- Open space incentives (OSI): Up to 250 points for local requirements and incentives that keep flood-prone portions of new development open.
- Low-density zoning (LZ): Up to 600 points for zoning districts that require lot sizes of 5 acres or larger.

3.4.1 Is the plan multi-jurisdictional?

You answered:

✓ Yes

CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process.

CRS points : 382

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.1.b. The plan must list the jurisdiction(s) participating in the plan that seek approval.

Element A.1.c. The plan must identify who represented each jurisdiction. The Plan must provide, at a minimum, the jurisdiction represented and the person's position or title and agency within the jurisdiction.

3.4.2 Does the plan include multiple counties?

You answered:

✗ No

Things to Consider

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.1.b. The plan must list the jurisdiction(s) participating in the plan that seek approval.

Element A.1.c. The plan must identify who represented each jurisdiction. The Plan must provide, at a minimum, the jurisdiction represented and the person's position or title and agency within the jurisdiction.

3.4.3 Is the plan locally adopted?

You answered:

✔ Yes

No recommendations

3.4.5

Was a Certified Floodplain Manager included in the hazard mitigation planning process?

You answered:

✘ No

Things to Consider

Informative Resources:

- Association of State Floodplain Mappers - [ASFPM Certified Floodplain Manager Program Information](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 430- Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Regulations administration (RA):** Up to 67 points for having trained staff and administrative procedures that meet specified standards.

3.4.6

Does the All-Hazards Mitigation Plan identify the involvement of a broad base of your community, such as public officials, civic organizations, businesses, and citizens?

You answered:

✔ Yes

CRS Suggestions

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Linkages

Element C.1.a. The plan must describe each jurisdiction's existing authorities, policies, programs and resources available to accomplish hazard mitigation.

Element C.5.c. The plan must identify the position, office, department, or agency responsible for implementing and administering the action (for each jurisdiction), and identify potential funding sources and expected timeframes for completion.

Element C.6.c. A multi-jurisdictional plan must describe each participating jurisdiction's individual process for integrating hazard mitigation actions applicable to their community into other planning mechanisms.

Element C.6.d. The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts.

3,4,7

Does the All-Hazards Mitigation Plan describe the support and involvement of local government departments and offices?

You answered:

✔ Yes

 **CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.5.c. The plan must identify the position, office, department, or agency responsible for implementing and administering the action (for each jurisdiction), and identify potential funding sources and expected timeframes for completion.

Element C.6.c. A multi-jurisdictional plan must describe each participating jurisdiction's individual process for integrating hazard mitigation actions applicable to their community into other planning mechanisms.

Element C.6.d. The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts.

3-4-3 **Does the All-Hazards Mitigation Plan provide a clear explanation of participation techniques used during its development?**

You answered:

✓ Yes

CRS Suggestions

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.1.a. Documentation of how the plan was prepared must include the schedule or timeframe and activities that made up the plan's development as well as who was involved. Documentation typically is met with a narrative description, but may also include, for example, other documentation such as copies of meeting minutes, sign-in sheets, or newspaper articles. Document means provide the factual evidence for how the jurisdictions developed the plan.

Element A.1.b. The plan must list the jurisdiction(s) participating in the plan that seek approval.

Element A.1.c. The plan must identify who represented each jurisdiction. The Plan must provide, at a minimum, the jurisdiction represented and the person's position or title and agency within the jurisdiction.

Element A.1.d. For each jurisdiction seeking plan approval, the plan must document how they were involved in the planning process. For example, the plan may document meetings attended, data provided, or stakeholder and public involvement activities offered. Jurisdictions that adopt the plan without documenting how they participated in the planning process will not be approved.

Involved in the process means engaged as participants and given the chance to provide input to affect the plan's content. This is more than simply being invited (See "opportunity to be involved in the planning process" in A2 below) or only adopting the plan.

Element A.1.e. Plan updates must include documentation of the current planning process undertaken to update the plan.

Element A.2.a. The plan must identify all stakeholders involved or given an opportunity to be involved in the planning process. At a minimum, stakeholders must include:

1) Local and regional agencies involved in hazard mitigation

activities;

2) Agencies that have the authority to regulate development; and

3) Neighboring communities. A2.c. The plan must identify how the stakeholders were invited to participate in the process. Examples of stakeholders include, but are not limited to:

- Local and regional agencies involved in hazard mitigation include public works, zoning, emergency management, local floodplain administrators, special districts, and GIS departments.

- Agencies that have the authority to regulate development include planning and community development departments, building officials, planning commissions, or other elected officials.

- Neighboring communities include adjacent counties and municipalities, such as those that are affected by similar hazard events or may be partners in hazard mitigation and response activities.

- Other interests may be defined by each jurisdiction and will vary with each one. These include, but are not limited to, business, academia, and other private and non-profit interests depending on the unique characteristics of the community.

Element A.3.a. The plan must document how the public was given the opportunity to be involved in the planning process and how their feedback was incorporated into the plan. Examples include, but are not limited to, sign-in sheets from open meetings, interactive websites with drafts for public review and comment, questionnaires or surveys, or booths at popular community events.

3.A.9

Does the All-Hazard Mitigation Plan describe past mitigation efforts (i.e. shoreline stabilization, land acquisition, etc) along with their costs and effectiveness?

You answered:

No

Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.1.a. The plan must describe each jurisdiction's existing authorities, policies, programs and resources available to accomplish hazard mitigation.

3.B.10

Does the hazard mitigation plan provide a general explanation of the environmental, social, and economic consequences of failing to address natural hazards?

You answered:

✔ Yes

 **CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.


Element B.3.a. For each participating jurisdiction, the plan must describe the potential impacts of each of the identified hazards on the community.

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Does the plan include municipal maps that indicate local hazard risks, such as floodzones, storm surge inundation, and erosion rates?

You answered:

✔ Yes

 **CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.c. The description, or profile, must include information on location, extent, previous occurrences, and future probability for each hazard. Previous occurrences and future probability are addressed in sub-element B2. The information does not necessarily need to be described or presented separately for location, extent, previous occurrences, and future probability. For example, for some hazards, one map with explanatory text could provide information on location, extent, and future probability.

Element B.4.a. The plan must describe the types (residential, commercial, institutional, etc.) and estimate the numbers of repetitive loss properties located in identified flood hazard areas.

3.A.12

Does the plan identify shoreline erosion as a hazard?**You answered:**

✔ Yes

 **CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 **Hazard Mitigation Suggestions**

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

ER-1 Map and Assess Vulnerability to Erosion

Erosion risk can be better assessed and monitored with mapping techniques, including the following:

- Using GIS to identify and map erosion hazard areas.
- Developing and maintaining a database to track community vulnerability to erosion.
- Using GIS to identify concentrations of at-risk structures.
- Improving mapping of hazard areas to educate residents about unexpected risks.

ER-2 Manage Development in Erosion Hazard Areas

Erosion damage can be mitigated by regulating how development occurs in hazard areas, such as the following:

- Adopting sediment and erosion control regulations.
- Adopting zoning and erosion overlay districts.
- Developing an erosion protection program for high hazard areas.
- Employing erosion control easements.
- Prohibiting development in high-hazard areas.
- Developing and implementing an erosion management plan.
- Requiring mandatory erosion surcharges on homes.

Linkages

- Locating utilities and critical facilities outside of areas susceptible to erosion to decrease the risk of service disruption.

ER-3 Promote or Require Site and Building Design Standards to Minimize Erosion Risk

Development can be designed to minimize damage due to erosion using the following techniques:

- Constructing open foundation systems on buildings to minimize scour.
- Constructing deep foundations in erosion hazard areas.
- Clustering buildings during building and site design.
- Designing and orienting infrastructure to deter erosion and accretion.

ER-4 Remove Existing Buildings and Infrastructure from Erosion Hazard Areas

(FEMA Resources/Publications FEMA P-55 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1671>)

To prevent damage to buildings and infrastructure from erosion, consider acquiring and demolishing or relocating at-risk buildings and infrastructure and enforcing permanent restrictions on development after land and structure acquisition.

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Preventing erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile fabric.
- Stabilizing cliffs with terracing or plantings of grasses or other plants to hold soil together.
- Prohibiting removal of natural vegetation from dunes and slopes.
- Planting mature trees in the coastal riparian zone to assist in dissipation of the wind force in the breaking wave zone.
- Using a hybrid of hard/soft engineering techniques (i.e., combine low-profile rock, rubble, oyster reefs, or wood structures with vegetative planting or other soft stabilization techniques).
- Implementing marine riparian habitat reinstatement or revegetation.
- Using a rock splash pad to direct runoff and minimize the potential for erosion.
- Using bioengineered bank stabilization techniques.

ER-6 Increase Awareness of Erosion Hazards

Linkages

Consider ways to help citizens become more aware of specific erosion risks in your area, such as:

- Notifying property owners located in high-risk areas.
- Disclosing the location of high-risk areas to buyers.
- Developing a brochure describing risk and potential mitigation techniques.
- Offering GIS hazard mapping online for residents and design professionals.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-6 Adopt Policies to Reduce Stormwater Runoff

In addition to stormwater management, techniques to reduce rain runoff can prevent flooding and erosion, such as:

- Designing a "natural runoff" or "zero discharge" policy for stormwater in subdivision design.
- Requiring more trees be preserved and planted in landscape designs to reduce the amount of stormwater runoff.
- Requiring developers to plan for on-site sediment retention.
- Requiring developers to construct on-site retention basins for excessive stormwater and as a firefighting water source.
- Encouraging the use of porous pavement, vegetative buffers, and islands in large parking areas.
- Conforming pavement to land contours so as not to provide easier avenues for stormwater.
- Encouraging the use of permeable driveways and surfaces to reduce runoff and increase groundwater recharge.
- Adopting erosion and sedimentation control regulations for construction and farming.

D-8 Enhance Landscaping and Design Measures

Encourage drought-tolerant landscape design through measures such as:

- Using permeable driveways and surfaces to reduce runoff and promote groundwater recharge.

D-10 Educate Farmers on Soil and Water Conservation Practices

Encourage farmers to implement soil and water conservation practices that foster soil health and improve soil quality to help increase resiliency and mitigate the impacts of droughts. Potential conservation practices include the following:

Linkages

- Practicing contour farming by farming along elevation contour lines to slow water runoff during rainstorms and prevent soil erosion, allowing the water time to absorb into the soil.
- Using terracing on hilly or mountainous terrain to decrease soil erosion and surface runoff.
- Collecting rainwater and using natural runoff to water plants.

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Using a rock splash pad to direct runoff and minimize the potential for erosion.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

1.4.13 **Does the plan identify sea-level rise as a hazard?**

You answered:

✓ Yes

 **CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 **Hazard Mitigation Suggestions**

SLR-1 Map and Assess Vulnerability to Sea Level Rise

To better understand and assess local vulnerability to sea level rise, consider actions such as:

- Modeling various "what-if" scenarios to estimate potential vulnerabilities in order to develop sea level rise mitigation priorities.
- Using GIS to map hazard areas, at-risk structures, and associated hazards (e.g., flood and storm surge) to assess high-risk areas.

Linkages

- Developing an inventory of public buildings and infrastructure that may be particularly vulnerable to sea level rise.
- Adding future conditions hydrology and areas that may be inundated by sea level rise to Digital Flood Insurance Rate Maps (DFIRM).

SLR-2 Manage Development in High-Risk Areas

Local governments can mitigate future losses resulting from sea level rise by regulating development in potential hazard areas through land use planning, including:

- Using zoning, subdivision regulations, and/or a special sea level rise overlay district to designate high-risk areas and specify the conditions for the use and development of specific areas.
- Promoting conservation and management of open space, wetlands, and/or sea level rise boundary zones to separate developed areas from high-hazard areas.
- Prohibiting the redevelopment of areas destroyed by storms or chronic erosion in order to prevent future losses.
- Encouraging compact community design in low-risk areas.
- Establishing setbacks in high-risk areas that account for potential sea level rise.

SRL-3 Prevent Infrastructure Expansion in High-Risk Areas

Future development can be protected from damage resulting from sea level rise through the following:

- Setting guidelines for annexation and service extensions in high-risk areas.
- Locating utilities and critical facilities outside of areas susceptible to sea level rise to decrease the risk of service disruption.
- Requiring all critical facilities to be built 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.

SRL-4 Protect Buildings and Infrastructure

Existing structures, infrastructure, and critical facilities can be protected from sea level rise through the following:

- Acquiring and demolishing or relocating structures located in high-risk areas.
- Retrofitting structures to elevate them above potential sea level rise levels.
- Retrofitting critical facilities to be 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.
- Replacing exterior building components with more hazard resistant materials.

Linkages

SLR-5 Preserve High-Hazard Areas as Open Space

Preserve open space to benefit natural resources and to reduce risk to structures from potential sea level rise. Techniques include:

- Developing an open space acquisition, reuse, and preservation plan targeting hazard areas.
- Developing a land banking program for the preservation and management of the natural and beneficial functions of flood hazard areas.
- Adopting rolling easements along the shoreline to promote natural migration of shorelines.
- Using transfer of development rights to allow a developer to increase densities on another parcel that is not at risk in return for keeping floodplain areas vacant.
- Compensating an owner for partial rights, such as easement or development rights, to prevent a property from being developed.

SLR-6 Protect and Restore Natural Buffers

Natural resources provide floodplain protection, riparian buffers, and other ecosystem services that mitigate sea level rise. It is important to preserve such functionality with the following:

- Examining the appropriate use of beach nourishment, sand scraping, dune-gap plugs, etc., for coastal hazards.
- Implementing dune restoration, plantings (e.g., sea oats), and use of natural materials.
- Examining the appropriate use of sediment-trapping vegetation, sediment mounds, etc., for coastal hazards.
- Planting sediment-trapping vegetation to buffer the coast against coastal storms by collecting sediment in protective features such as dunes or barrier islands.
- Performing sand scraping—using bulldozers to deposit the top foot of sand above the high-tide line—to reinforce the beach without adding new sand.
- Using sediment mounds to act as artificial dunes or plugs for natural dune gaps in order to slow the inland progress of storm related wind and water.

SLR-7 Increase Awareness of Sea Level Rise

Improve public awareness of risks due to sea level rise through outreach activities such as:

- Encouraging homeowners to purchase flood insurance.
- Using outreach programs to facilitate technical assistance programs that address measures that citizens can take or facilitate funding for mitigation measures.

Linkages

- Annually distributing flood protection safety pamphlets or brochures to the owners of property in high-risk areas.
- Educating citizens about safety during flood conditions, including the dangers of driving on flooded roads.
- Using outreach programs to advise homeowners of risks to life, health, and safety.
- Offering GIS hazard mapping online for residents and design professionals.
- Disclosing the location

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

3.6.14

Does the hazard mitigation plan specify timelines for completing projects and achieving goals?

You answered:

✓ Yes

CRS Suggestions

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.6.a. The plan must identify how, when, and by whom the plan will be monitored. Monitoring means tracking the implementation of the plan over time. For example, monitoring may include a system for tracking the status of the identified hazard mitigation actions.

Element A.6.b. The plan must identify how, when, and by whom the plan will be evaluated. Evaluating means assessing the effectiveness of the plan at achieving its stated purpose and goals.

Element A.6.c. The plan must identify how, when, and by whom the plan will be updated. Updating means reviewing and revising the plan at least once every five years.

3.4.15 Do mitigation goals correspond with measurable mitigation objectives?

You answered:

✘ No

! Things to Consider

Informative Resources:

- Case Study - [Recommendations of the DRBC Flood Advisory Committee \(FAC\)](#) for more effective floodplain regulations in the Delaware River Basin

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.3.a. The plan must include general hazard mitigation goals that represent what the jurisdiction(s) seeks to accomplish through mitigation plan implementation. Goals are broad policy statements that explain what is to be achieved.

Element C.3.b. The goals must be consistent with the hazards identified in the plan.

3.4.16 Is a process for intergovernmental coordination explained for mitigating natural hazards?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.4.a. The plan must include a mitigation strategy that

Linkages

1) analyzes actions and/or projects that the jurisdiction considered to reduce the impacts of hazards identified in the risk assessment, and

2) identifies the actions and/or projects that the jurisdiction intends to implement.

3.4.17

Does the plan identify opportunities to incorporate hazard mitigation into existing planning mechanisms, e.g. land use planning, capital investments, shoreline restoration projects?

You answered:

✓ Yes



CRS Suggestions

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.



Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.6.a. The plan must describe the community's process to integrate the data, information, and hazard mitigation goals and actions into other planning mechanisms.

Element C.6.b. The plan must identify the local planning mechanisms where hazard mitigation information and/or actions may be incorporated. Planning mechanisms means governance structures that are used to manage local land use development and community decisionmaking, such as comprehensive plans, capital improvement plans, or other long-range plans.

Element C.6.c. A multi-jurisdictional plan must describe each participating jurisdiction's individual process for integrating hazard mitigation actions applicable to their community into other planning mechanisms.

Element C.6.d. The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts.

Element C.6.e. The updated plan must continue to describe how the mitigation strategy, including the goals and hazard mitigation actions will be incorporated into other planning mechanisms.

3.5.18

Does the plan identify the federally required update frequency? (5 years)

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.6.c. The plan must identify how, when, and by whom the plan will be updated. Updating means reviewing and revising the plan at least once every five years.

3.5

Are policies in place that discourage or restrict the siting of critical facilities in high-hazard areas?

You answered:

✘ No

! Things to Consider

If the community has an adopted Floodplain Management Plan, it should be incorporated or aligned with the All Hazards Mitigation plan during development, or when updating the plan.

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood prone lands free of development, and protect and enhance the natural functions of flood plains.

- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain Management Planning (FMP):** Up to 382 points for a community wide FMP that follows a 10 step planning process. Step 2 is to involve the public.

3.3

Is it incorporated as an element of the municipal master plan?

You answered:

No

No recommendations

3.5.2 Is it incorporated in the stormwater management plan?

You answered:

No

No recommendations

3.5.3 Is it incorporated in the All-Hazard Mitigation Plan?

You answered:

No

 Things to Consider

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.4.a. The plan must document what existing plans, studies, reports, and technical information were reviewed. Examples of the types of existing sources reviewed include, but are not limited to, the state hazard mitigation plan, local comprehensive plans, hazard specific reports, and flood insurance studies.

3.5.4 Does the municipality have a Certified Floodplain Manager (CFM) on staff?

You answered:

No

 Things to Consider

The Association of State Floodplain Managers has established a national program for professional certification of floodplain managers. The program recognizes continuing education and professional development that enhance the knowledge and performance of local, state, federal, and private-sector floodplain managers.

More information on the certification of floodplain managers can be found [here](#).

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Linkages

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Regulations administration (RA):** Up to 67 points for having trained staff and administrative procedures that meet specified standards.

3.5.5 **Was a certified floodplain manager included in the planning process?**

You answered:

No

 **Things to Consider**

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Regulations administration (RA):** Up to 67 points for having trained staff and administrative procedures that meet specified standards.

3.5.6 **Was a licensed professional planner included in the planning process?**

You answered:

Yes

No recommendations

3.5.7 **Does the municipality participate in the National Flood Insurance Program (NFIP)?**

You answered:

Yes

No recommendations

3.5.8 **Does the municipality have a flood damage prevention ordinance?**

You answered:

Yes

No recommendations

3.6 **Does the municipality employ any of the following land use regulations and policies?**

You answered:

✔ Yes

No recommendations

3.6.1 **Transfer of development rights or purchase of development rights?**

You answered:

✔ Yes

 **CRS Suggestions**

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).


- **Regulations administration (RA):** Up to 67 points for having trained staff and administrative procedures that meet specified standards.

CRS points : 67

3.6.2 **Conservation overlay districts or cluster development?**

You answered:

✔ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.6.3 **Zoning for open or recreational space?**

You answered:

✔ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the

CRS.

3.6.4 **Riparian and/or wetland buffer ordinances?****You answered:**

✔ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

 **Sustainable Jersey Suggestions****Tree Protection Ordinance (10 points)**

Protecting trees within a community can have a multitude of benefits for the environment as well as for the health and safety of residents. In order for a municipality to adopt a Woodland Protection/Tree Protection Ordinance, there needs to be a clear connection between the town's Master Plan Goals and mapping. Master Plans should identify wooded areas as areas in need of protection. Additionally, the Master Plan mapping should be included as part of the municipality's overall vision and land-use goals. Clustering, easements, identification of trees of significance, and open space acquisition, among other tools, can be a part of a municipality's plan to preserve wooded areas.

Clustering Ordinance (10 points)

Adopting a municipal clustering ordinance provides potential protection for critical natural resources. A well-planned cluster development concentrates dwelling units on the most buildable portion of the site and preserves common open space for conservation, agriculture, recreation or public and semi-public uses. Through the protection of natural resources and the inherent reduction in impervious coverage, cluster developments may result in the enhanced protection and sustainability of municipal and state-wide ecosystems, including drinking water, soil, and habitat quality.

SJ points : 20 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.4.a. The plan must document what existing plans, studies, reports, and technical information were reviewed. Examples of the types of existing sources reviewed include, but are not limited to, the state hazard mitigation plan, local comprehensive plans, hazard specific reports, and flood insurance studies.

3.8.5 Lot size averaging?

You answered:

✓ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

 **Hazard Mitigation Suggestions**

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-6 Adopt Policies to Reduce Stormwater Runoff

In addition to stormwater management, techniques to reduce rain runoff can prevent flooding and erosion, such as:

- Designing a "natural runoff" or "zero discharge" policy for stormwater in subdivision design.
- Requiring more trees be preserved and planted in landscape designs to reduce the amount of stormwater runoff.
- Requiring developers to plan for on-site sediment retention.
- Requiring developers to construct on-site retention basins for excessive stormwater and as a firefighting water source.
- Encouraging the use of porous pavement, vegetative buffers, and islands in large parking areas.
- Conforming pavement to land contours so as not to provide easier avenues for stormwater.
- Encouraging the use of permeable driveways and surfaces to reduce runoff and increase groundwater recharge.
- Adopting erosion and sedimentation control regulations for construction and farming.

D-8 Enhance Landscaping and Design Measures

Encourage drought-tolerant landscape design through measures such as:

- Using permeable driveways and surfaces to reduce runoff and promote groundwater recharge.

Linkages

D-10 Educate Farmers on Soil and Water Conservation Practices

Encourage farmers to implement soil and water conservation practices that foster soil health and improve soil quality to help increase resiliency and mitigate the impacts of droughts. Potential conservation practices include the following:

- Practicing contour farming by farming along elevation contour lines to slow water runoff during rainstorms and prevent soil erosion, allowing the water time to absorb into the soil.
- Using terracing on hilly or mountainous terrain to decrease soil erosion and surface runoff.
- Collecting rainwater and using natural runoff to water plants.

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Using a rock splash pad to direct runoff and minimize the potential for erosion.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

3.5.6 **Re-zoning for lower densities?**

You answered:

✔ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.5.7 **Rolling easements?**

You answered:

✔ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.6.9 Landscaping, tree, and vegetation protection?

You answered:

✔ Yes

 CRS Suggestions

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

 Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.4.a. The plan must document what existing plans, studies, reports, and technical information were reviewed. Examples of the types of existing sources reviewed include, but are not limited to, the state hazard mitigation plan, local comprehensive plans, hazard specific reports, and flood insurance studies.

3.6.9 Additional setback requirements in erosion areas?

You answered:

✔ Yes


 CRS Suggestions

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.7 Does the municipality have a current FEMA approved All-Hazards Mitigation Plan (municipal HMP or annex to county-wide or multi-county plan that was updated within the last 5 years)?

You answered:

✔ Yes

 CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the

hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process.

CRS points : 452

3/7.1

Did the HM planning process include involvement of a variety of municipal departments (eg. emergency managers, floodplain managers, coastal managers, and public works officials)?

You answered:

✓ Yes

 **CRS Suggestions**

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Regulations administration (RA):** Up to 67 points for having trained staff and administrative procedures that meet specified standards.

CRS points : 67

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.1.a. The plan must describe each jurisdiction's existing authorities, policies, programs and resources available to accomplish hazard mitigation.

Element C.5.c. The plan must identify the position, office, department, or agency responsible for implementing and administering the action (for each jurisdiction), and identify potential funding sources and expected timeframes for completion.

Element C.6.c. A multi-jurisdictional plan must describe each participating jurisdiction's individual process for integrating hazard mitigation actions applicable to their community into other planning mechanisms.

Element C.6.d. The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts.

3/7.2

Was a Certified Floodplain Manager included in the hazard mitigation planning process?

You answered:

✓ Yes

 CRS Suggestions

Informative Resources:

- Association of State Floodplain Mappers - [ASFPM Certified Floodplain Manager Program Information](#)

Section 430- Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

Regulations administration (RA): Up to 67 points for having trained staff and administrative procedures that meet specified standards.

3.7.3 **Did the All-Hazards Mitigation Plan include the involvement of a broad base of your community, such as public officials, civic organizations, businesses, and citizens, and was the process and outcomes included in the Plan??**

You answered:

Yes

No recommendations

3.7.4 **Does the plan describe past mitigation efforts (i.e. shoreline stabilization, land acquisition, etc), along with their costs and effectiveness?**

You answered:

Yes

 CRS Suggestions

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 Hazard Mitigation Suggestions

Element C.1.a. The plan must describe each jurisdiction's existing authorities, policies, programs and resources available to accomplish hazard mitigation.

3.7.5 **Does the plan identify shoreline erosion as a hazard?**

You answered:

No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

ER-1 Map and Assess Vulnerability to Erosion

Erosion risk can be better assessed and monitored with mapping techniques, including the following:

- Using GIS to identify and map erosion hazard areas.
- Developing and maintaining a database to track community vulnerability to erosion.
- Using GIS to identify concentrations of at-risk structures.
- Improving mapping of hazard areas to educate residents about unexpected risks.

ER-2 Manage Development in Erosion Hazard Areas

Erosion damage can be mitigated by regulating how development occurs in hazard areas, such as the following:

- Adopting sediment and erosion control regulations.
- Adopting zoning and erosion overlay districts.
- Developing an erosion protection program for high hazard areas.
- Employing erosion control easements.
- Prohibiting development in high-hazard areas.
- Developing and implementing an erosion management plan.
- Requiring mandatory erosion surcharges on homes.
- Locating utilities and critical facilities outside of areas susceptible to erosion to decrease the risk of service disruption.

ER-3 Promote or Require Site and Building Design Standards to Minimize Erosion Risk

Development can be designed to minimize damage due to erosion using the following techniques:

Linkages

- Constructing open foundation systems on buildings to minimize scour.
- Constructing deep foundations in erosion hazard areas.
- Clustering buildings during building and site design.
- Designing and orienting infrastructure to deter erosion and accretion.

ER-4 Remove Existing Buildings and Infrastructure from Erosion Hazard Areas

(FEMA Resources/Publications FEMA P-55

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1671>)

To prevent damage to buildings and infrastructure from erosion, consider acquiring and demolishing or relocating at-risk buildings and infrastructure and enforcing permanent restrictions on development after land and structure acquisition.

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Preventing erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile fabric.
- Stabilizing cliffs with terracing or plantings of grasses or other plants to hold soil together.
- Prohibiting removal of natural vegetation from dunes and slopes.
- Planting mature trees in the coastal riparian zone to assist in dissipation of the wind force in the breaking wave zone.
- Using a hybrid of hard/soft engineering techniques (i.e., combine low-profile rock, rubble, oyster reefs, or wood structures with vegetative planting or other soft stabilization techniques).
- Implementing marine riparian habitat reinstatement or revegetation.
- Using a rock splash pad to direct runoff and minimize the potential for erosion.
- Using bioengineered bank stabilization techniques.

ER-6 Increase Awareness of Erosion Hazards

Consider ways to help citizens become more aware of specific erosion risks in your area, such as:

- Notifying property owners located in high-risk areas.
- Disclosing the location of high-risk areas to buyers.
- Developing a brochure describing risk and potential mitigation techniques.

Linkages

- Offering GIS hazard mapping online for residents and design professionals.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-6 Adopt Policies to Reduce Stormwater Runoff

In addition to stormwater management, techniques to reduce rain runoff can prevent flooding and erosion, such as:

- Designing a "natural runoff" or "zero discharge" policy for stormwater in subdivision design.
- Requiring more trees be preserved and planted in landscape designs to reduce the amount of stormwater runoff.
- Requiring developers to plan for on-site sediment retention.
- Requiring developers to construct on-site retention basins for excessive stormwater and as a firefighting water source.
- Encouraging the use of porous pavement, vegetative buffers, and islands in large parking areas.
- Conforming pavement to land contours so as not to provide easier avenues for stormwater.
- Encouraging the use of permeable driveways and surfaces to reduce runoff and increase groundwater recharge.
- Adopting erosion and sedimentation control regulations for construction and farming.

D-8 Enhance Landscaping and Design Measures

Encourage drought-tolerant landscape design through measures such as:

- Using permeable driveways and surfaces to reduce runoff and promote groundwater recharge.

D-10 Educate Farmers on Soil and Water Conservation Practices

Encourage farmers to implement soil and water conservation practices that foster soil health and improve soil quality to help increase resiliency and mitigate the impacts of droughts. Potential conservation practices include the following:

- Practicing contour farming by farming along elevation contour lines to slow water runoff during rainstorms and prevent soil erosion, allowing the water time to absorb into the soil.
- Using terracing on hilly or mountainous terrain to decrease soil erosion and surface runoff.
- Collecting rainwater and using natural runoff to water plants.

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Using a rock splash pad to direct runoff and minimize the potential for erosion.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

3,7,8

Does the plan identify sea-level rise as a hazard?

You answered:

✓ Yes

**CRS Suggestions**

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

**Hazard Mitigation Suggestions**

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

SLR-1 Map and Assess Vulnerability to Sea Level Rise

To better understand and assess local vulnerability to sea level rise, consider actions such as:

- Modeling various "what-if" scenarios to estimate potential vulnerabilities in order to develop sea level rise mitigation priorities.
- Using GIS to map hazard areas, at-risk structures, and associated hazards (e.g., flood and storm surge) to assess high-risk areas.
- Developing an inventory of public buildings and infrastructure that may be particularly vulnerable to sea level rise.

Linkages

- Adding future conditions hydrology and areas that may be inundated by sea level rise to Digital Flood Insurance Rate Maps (DFIRM).

SLR-2 Manage Development in High-Risk Areas

Local governments can mitigate future losses resulting from sea level rise by regulating development in potential hazard areas through land use planning, including:

- Using zoning, subdivision regulations, and/or a special sea level rise overlay district to designate high-risk areas and specify the conditions for the use and development of specific areas.
- Promoting conservation and management of open space, wetlands, and/or sea level rise boundary zones to separate developed areas from high-hazard areas.
- Prohibiting the redevelopment of areas destroyed by storms or chronic erosion in order to prevent future losses.
- Encouraging compact community design in low-risk areas.
- Establishing setbacks in high-risk areas that account for potential sea level rise.

SRL-3 Prevent Infrastructure Expansion in High-Risk Areas

Future development can be protected from damage resulting from sea level rise through the following:

- Setting guidelines for annexation and service extensions in high-risk areas.
- Locating utilities and critical facilities outside of areas susceptible to sea level rise to decrease the risk of service disruption.
- Requiring all critical facilities to be built 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.

SRL-4 Protect Buildings and Infrastructure

Existing structures, infrastructure, and critical facilities can be protected from sea level rise through the following:

- Acquiring and demolishing or relocating structures located in high-risk areas.
- Retrofitting structures to elevate them above potential sea level rise levels.
- Retrofitting critical facilities to be 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.
- Replacing exterior building components with more hazard resistant materials.

SLR-5 Preserve High-Hazard Areas as Open Space

Linkages

Preserve open space to benefit natural resources and to reduce risk to structures from potential sea level rise. Techniques include:

- Developing an open space acquisition, reuse, and preservation plan targeting hazard areas.
- Developing a land banking program for the preservation and management of the natural and beneficial functions of flood hazard areas.
- Adopting rolling easements along the shoreline to promote natural migration of shorelines.
- Using transfer of development rights to allow a developer to increase densities on another parcel that is not at risk in return for keeping floodplain areas vacant.
- Compensating an owner for partial rights, such as easement or development rights, to prevent a property from being developed.

SLR-6 Protect and Restore Natural Buffers

Natural resources provide floodplain protection, riparian buffers, and other ecosystem services that mitigate sea level rise. It is important to preserve such functionality with the following:

- Examining the appropriate use of beach nourishment, sand scraping, dune-gap plugs, etc., for coastal hazards.
- Implementing dune restoration, plantings (e.g., sea oats), and use of natural materials.
- Examining the appropriate use of sediment-trapping vegetation, sediment mounds, etc., for coastal hazards.
- Planting sediment-trapping vegetation to buffer the coast against coastal storms by collecting sediment in protective features such as dunes or barrier islands.
- Performing sand scraping—using bulldozers to deposit the top foot of sand above the high-tide line—to reinforce the beach without adding new sand.
- Using sediment mounds to act as artificial dunes or plugs for natural dune gaps in order to slow the inland progress of storm related wind and water.

SLR-7 Increase Awareness of Sea Level Rise

Improve public awareness of risks due to sea level rise through outreach activities such as:

- Encouraging homeowners to purchase flood insurance.
- Using outreach programs to facilitate technical assistance programs that address measures that citizens can take or facilitate funding for mitigation measures.

Linkages

- Annually distributing flood protection safety pamphlets or brochures to the owners of property in high-risk areas.
- Educating citizens about safety during flood conditions, including the dangers of driving on flooded roads.
- Using outreach programs to advise homeowners of risks to life, health, and safety.
- Offering GIS hazard mapping online for residents and design professionals.
- Disclosing the location

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.a. The plan must include a description of the natural hazards that can affect the jurisdiction(s) in the planning area.

3.7.7 **Does the plan include municipal maps that indicate local hazard risks, such as flood zones, storm surge inundation, shoreline erosion rates, or areas susceptible to flash-flooding?**

You answered:

✓ Yes

CRS Suggestions

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.1.c. The description, or profile, must include information on location, extent, previous occurrences, and future probability for each hazard. Previous occurrences and future probability are addressed in sub-element B2. The information does not necessarily need to be described or presented separately for location, extent, previous occurrences, and future probability. For example, for some hazards, one map with explanatory text could provide information on location, extent, and future probability.

Element B.4.a. The plan must describe the types (residential, commercial, institutional, etc.) and estimate the numbers of repetitive loss properties located in identified flood hazard areas.

3.7.9 **Does the plan provide a general explanation of the environmental, social, and economic consequences of failing to address natural hazards?**

You answered:

✔ Yes

 **CRS Suggestions**

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

 **Hazard Mitigation Suggestions**

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element B.3.a. For each participating jurisdiction, the plan must describe the potential impacts of each of the identified hazards on the community.

3.7.9 **Do any of your HMP actions involve working across municipal boundaries to mitigate natural hazards?**

You answered:

✔ Yes

No recommendations

3.7.10 **Are vulnerabilities to regional or shared critical assets such as critical facilities and evacuation routes identified?**

You answered:

✔ Yes

No recommendations

3.8 **Has the municipality's Master Plan been updated in the last 10 years?**

You answered:

✘ No

! Things to Consider

The Sustainable Jersey certification program offers credits to communities with a Sustainability Master Plan Revision, which entails adding a Green Building and Environmental Sustainability Element to the community's Municipal Master Plan.

Details for this Sustainable Jersey Action Item can be found [here](#).

3.8.1 **Does the plan explain the involvement of hazard mitigation professionals? (e.g. emergency managers, floodplain managers, coastal managers, and public works officials)**

You answered:

✘ No

No recommendations

3.8.2 **Did the preparation of the plan involve a broad base of the community? (e.g. public officials, civic organizations, businesses, and citizens)**

You answered:

✔ Yes

No recommendations

3.9.1 **Does the plan include strategies to reduce the physical vulnerability of community facilities and residential structures to hazards? (i.e. retrofits, elevation, acquisition, etc.)?**

You answered:

✔ Yes

No recommendations

3.9.2 **Is the hazard mitigation plan incorporated into the master plan (by reference, as a separate element, and/or across multiple elements) and vice versa?**

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

While the CRS does not specifically award points for having a Hazards Mitigation Plan, certain specifics of a community's Hazards Mitigation Plan may result in points elsewhere in the CRS.

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.6.a. The plan must describe the community's process to integrate the data, information, and hazard mitigation goals and actions into other planning mechanisms.

Element C.6.b. The plan must identify the local planning mechanisms where hazard mitigation information and/or actions may be incorporated. Planning mechanisms means governance structures that are used to manage local land use development and community decision making, such as comprehensive plans, capital improvement plans, or other long-range plans.

Element C.6.c. A multi-jurisdictional plan must describe each participating jurisdiction's individual process for integrating hazard mitigation actions applicable to their community into other planning mechanisms.

Element C.6.d. The updated plan must explain how the jurisdiction(s) incorporated the mitigation plan, when appropriate, into other planning mechanisms as a demonstration of progress in local hazard mitigation efforts.

Element C.6.e. The updated plan must continue to describe how the mitigation strategy, including the goals and hazard mitigation actions will be incorporated into other planning mechanisms.

3.3.1 Are the goals of the master plan and Hazard Mitigation Plan compatible?

You answered:

Yes

No recommendations

3.3.2 Do any of the goals conflict?

You answered:

No

No recommendations

3.3.3 Are areas of high hazard mapped in comparison to current land use? (i.e. map of current land use with hazard overlay)

You answered:

Yes

 **CRS Suggestions**

Though a special area management plan, beachfront management plan, or shoreline management plan are not included in the CRS, aspects of these plans can result in points in various sections of the CRS.

3.0.4 Are areas of high hazard mapped in comparison to future land use? (e.g. future land use map with hazard overlay, areas of redevelopment with hazard overlay, and/or buildout analysis/areas of developable land with hazard overlay)?

You answered:

Yes

No recommendations

3.0.5 Is there an adequate amount of developable land for projected growth in areas located outside of high hazard areas?

You answered:

Yes

No recommendations

3.0.6 Are transportation modes that are vulnerable to hazards identified?

You answered:

No

No recommendations

3.0.7 Does the transportation network identify opportunities for redundancy (i.e. alternate routes/modes) if key routes/modes are affected by coastal hazards?

You answered:

No

No recommendations

3.0.8 Does the community have an open space management plan or is open space an element within the municipal master plan?

You answered:

Yes

 **CRS Suggestions**

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.
- **Deed restrictions (DR):** Up to 50 points extra credit for legal restrictions that ensure that parcels credited for OPS will never be developed.
- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.
- **Special flood-related hazards open space (SHOS):** Up to 50 points if the OSP credited parcels are subject to one of the special flood-related hazards or if areas of special flood related hazard are covered by low density zoning regulations.
- **Open space incentives (OSI):** Up to 250 points for local requirements and incentives that keep flood-prone portions of new development open.
- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process: Step 7d - 5 points, if the plan reviews activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection.

 **Sustainable Jersey Suggestions**

Open Space Plans (10 points)

An Open Space and Recreation Plan, OSRP, (also referred to as the Open Space Plan, OSP) is a comprehensive document that guides municipal, county, and/or regional open space protection and preservation. The Plan tells how and why open space will be protected and provides a framework for implementation. An OSRP identifies and examines open space, recreation needs and other resources that are important to the municipality, and lays out a plan of action to protect and maintain these places.

1794 **Are natural areas that protect development from hazards identified and mapped (environmental resource inventory, shoreline assessment, etc.)?**

You answered:

✓ Yes

No recommendations

3.19.2 Is the plan updated in coordination with the master plan?

You answered:


No

No recommendations

3.11 Does the municipality have an adopted floodplain management plan?

You answered:

Yes

 CRS Suggestions

Section 420: Open Space Preservation: To prevent flood damage by keeping flood prone lands free of development, and protect and enhance the natural functions of flood plains.

- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain Management Planning (FMP):** Up to 382 points for a community wide FMP that follows a 10 step planning process. Step 2 is to involve the public.

3.11.1 Does the municipality have an updated flood damage prevention ordinance as recommended by the NJ DEP Bureau of Flood Control?

You answered:

Yes

No recommendations

3.11.2 Is it incorporated across relevant community plans:

You answered:

Yes

No recommendations

3.11.3 Hazard Mitigation Plan?

You answered:

Yes

No recommendations

3.11.2.2 **Master Plan?**

You answered:

✔ Yes

No recommendations

7.11.2.3 **Stormwater Management Plan?**

You answered:

✔ Yes

No recommendations

3.11.3 **Does the community use modified substantial damage/improvement thresholds and calculations that go beyond the National Flood Insurance Program's rules? (e.g. lowering of the percentage threshold that defines substantial damage or improvement, employing cumulative accounting, etc.)**

You answered:

✔ Yes

No recommendations

4.12 **Does the municipality have a stormwater management plan?**

You answered:

✔ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

 **Hazard Mitigation Suggestions**

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-5 Improve Stormwater Management Planning

Linkages

Rainwater and snowmelt can cause flooding and erosion in developed areas. Stormwater management practices to prevent this include:

- Completing a stormwater drainage study for known problem areas.
- Preparing and adopting a stormwater drainage plan and ordinance.
- Preparing and adopting a community-wide stormwater management master plan.
- Regulating development in upland areas in order to reduce stormwater run-off through a stormwater ordinance.
- Linking flood hazard mitigation objectives with EPA Stormwater Phase II initiatives.
- Developing engineering guidelines for drainage from new development.
- Requiring a drainage study with new development.
- Encouraging the use of Low Impact Development techniques

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

3.12.1 **Is the plan locally adopted and up-to-date (adopted within the last 6 yrs)?**

You answered:

✓ Yes


 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.12.2 **Are low-impact development techniques to manage stormwater and decrease runoff identified? (e.g. bioretention areas, tree protection ordinances, impervious cover limits, riparian buffers, vegetated drainage channels, and cluster development)?**

You answered:

✓ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

 Sustainable Jersey Suggestions

Tree Protection Ordinance (10 points)

Protecting trees within a community can have a multitude of benefits for the environment as well as for the health and safety of residents. In order for a municipality to adopt a Woodland Protection/Tree Protection Ordinance, there needs to be a clear connection between the town's Master Plan Goals and mapping. Master Plans should identify wooded areas as areas in need of protection. Additionally, the Master Plan mapping should be included as part of the municipality's overall vision and land-use goals. Clustering, easements, identification of trees of significance, and open space acquisition, among other tools, can be a part of a municipality's plan to preserve wooded areas.

Clustering Ordinance (10 points)

Adopting a municipal clustering ordinance provides potential protection for critical natural resources. A well-planned cluster development concentrates dwelling units on the most buildable portion of the site and preserves common open space for conservation, agriculture, recreation or public and semi-public uses. Through the protection of natural resources and the inherent reduction in impervious coverage, cluster developments may result in the enhanced protection and sustainability of municipal and state-wide ecosystems, including drinking water, soil, and habitat quality.

 Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element A.4.a. The plan must document what existing plans, studies, reports, and technical information were reviewed. Examples of the types of existing sources reviewed include, but are not limited to, the state hazard mitigation plan, local comprehensive plans, hazard specific reports, and flood insurance studies.

3.12.1 **Is impervious surface coverage mapped?**

You answered:

✓ Yes

No recommendations

3.12.1 **Are runoff and drainage problems identified?**

You answered:

✓ Yes

No recommendations

3.12.3 **Does the plan identify impacts to natural resources if the municipality reaches impervious coverage levels allowed by land use and zoning designations?**

You answered:

✓ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.12.5 **Has the municipality considered exceeding state-mandated stormwater requirements for redevelopment?**

You answered:

✓ Yes

No recommendations

3.12.7 **Does the plan describe the responsible parties for inspection and maintenance of stormwater facilities?**

You answered:

✓ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

3.12.7.1 **Does the municipality have an "Adopt a Stormdrain" or "Adopt a Basin" program?**

You answered:

✓ Yes

No recommendations

3.12.3 **Does the plan identify its connection to the All-Hazards Mitigation Plan?**

You answered:

✓ Yes

 **CRS Suggestions**

Though a stormwater management plan is not included in the CRS, aspects of a stormwater management plan can result in points in various sections of the CRS.

 **Hazard Mitigation Suggestions**

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Element A.4.a. The plan must document what existing plans, studies, reports, and technical information were reviewed. Examples of the types of existing sources reviewed include, but are not limited to, the state hazard mitigation plan, local comprehensive plans, hazard specific reports, and flood insurance studies.

3, 13

Does the municipality have a special area management plan, beachfront management plan, or shoreline management plan? **Inland: floodplain/riparian buffer inclusion?

You answered:

✗ No

 **Things to Consider**

A special area management plan is a management tool for programs to address difficult resource management issues, or land/water use conflicts in a more integrated manner through the application of comprehensive land and water use planning and management.

Developing a shoreline management plan allows you to designate what levels of development and/or shoreline stabilization would be appropriate given the characteristic of each shoreline segment.

An example of a Beachfront Management Plan from South Carolina can be viewed [here](#).

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Though a special area management plan, beachfront management plan, or shoreline management plan are not included in the CRS, aspects of these plans can result in points in various sections of the CRS.

A Special Area Management Plan, Beachfront Management Plan, or Shoreline Management Plan for the community should be incorporated into the community's All Hazards Mitigation Plan.

3.13.1 Does the plan identify the threat of coastal storms?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Though a special area management plan, beachfront management plan, or shoreline management plan are not included in the CRS, aspects of these plans can result in points in various sections of the CRS.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

ER-1 Map and Assess Vulnerability to Erosion

Erosion risk can be better assessed and monitored with mapping techniques, including the following:

- Using GIS to identify and map erosion hazard areas.
- Developing and maintaining a database to track community vulnerability to erosion.
- Using GIS to identify concentrations of at-risk structures.
- Improving mapping of hazard areas to educate residents about unexpected risks.

ER-2 Manage Development in Erosion Hazard Areas

Erosion damage can be mitigated by regulating how development occurs in hazard areas, such as the following:

- Adopting sediment and erosion control regulations.
- Adopting zoning and erosion overlay districts.
- Developing an erosion protection program for high hazard areas.
- Employing erosion control easements.
- Prohibiting development in high-hazard areas.
- Developing and implementing an erosion management plan.
- Requiring mandatory erosion surcharges on homes.

Linkages

- Locating utilities and critical facilities outside of areas susceptible to erosion to decrease the risk of service disruption.

ER-3 Promote or Require Site and Building Design Standards to Minimize Erosion Risk

Development can be designed to minimize damage due to erosion using the following techniques:

- Constructing open foundation systems on buildings to minimize scour.
- Constructing deep foundations in erosion hazard areas.
- Clustering buildings during building and site design.
- Designing and orienting infrastructure to deter erosion and accretion.

ER-4 Remove Existing Buildings and Infrastructure from Erosion Hazard Areas

(FEMA Resources/Publications FEMA P-55

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1671>)

To prevent damage to buildings and infrastructure from erosion, consider acquiring and demolishing or relocating at-risk buildings and infrastructure and enforcing permanent restrictions on development after land and structure acquisition.

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Preventing erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile fabric.
- Stabilizing cliffs with terracing or plantings of grasses or other plants to hold soil together.
- Prohibiting removal of natural vegetation from dunes and slopes.
- Planting mature trees in the coastal riparian zone to assist in dissipation of the wind force in the breaking wave zone.
- Using a hybrid of hard/soft engineering techniques (i.e., combine low-profile rock, rubble, oyster reefs, or wood structures with vegetative planting or other soft stabilization techniques).
- Implementing marine riparian habitat reinstatement or revegetation.
- Using a rock splash pad to direct runoff and minimize the potential for erosion.
- Using bioengineered bank stabilization techniques.

ER-6 Increase Awareness of Erosion Hazards

Linkages

Consider ways to help citizens become more aware of specific erosion risks in your area, such as:

- Notifying property owners located in high-risk areas.
- Disclosing the location of high-risk areas to buyers.
- Developing a brochure describing risk and potential mitigation techniques.
- Offering GIS hazard mapping online for residents and design professionals.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-6 Adopt Policies to Reduce Stormwater Runoff

In addition to stormwater management, techniques to reduce rain runoff can prevent flooding and erosion, such as:

- Designing a "natural runoff" or "zero discharge" policy for stormwater in subdivision design.
- Requiring more trees be preserved and planted in landscape designs to reduce the amount of stormwater runoff.
- Requiring developers to plan for on-site sediment retention.
- Requiring developers to construct on-site retention basins for excessive stormwater and as a firefighting water source.
- Encouraging the use of porous pavement, vegetative buffers, and islands in large parking areas.
- Conforming pavement to land contours so as not to provide easier avenues for stormwater.
- Encouraging the use of permeable driveways and surfaces to reduce runoff and increase groundwater recharge.
- Adopting erosion and sedimentation control regulations for construction and farming.

D-8 Enhance Landscaping and Design Measures

Encourage drought-tolerant landscape design through measures such as:

- Using permeable driveways and surfaces to reduce runoff and promote groundwater recharge.

D-10 Educate Farmers on Soil and Water Conservation Practices

Encourage farmers to implement soil and water conservation practices that foster soil health and improve soil quality to help increase resiliency and mitigate the impacts of droughts. Potential conservation practices include the following:

Linkages

- Practicing contour farming by farming along elevation contour lines to slow water runoff during rainstorms and prevent soil erosion, allowing the water time to absorb into the soil.
- Using terracing on hilly or mountainous terrain to decrease soil erosion and surface runoff.
- Collecting rainwater and using natural runoff to water plants.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

3.13.2 **Does the plan identify the threat of erosion?**

You answered:

✘ No

No recommendations

3.13.3 **Does the plan identify policies or programs in place for sediment and erosion control?**

You answered:

✘ No

No recommendations

3.13.4 **Does the plan identify the threat of sea level rise?**

You answered:

✘ No

! Things to Consider

Informative Resources:

What Does Tidal Flooding Look Like?

- Animation shows the causes of and strategies to help communities impacted by tidal flooding.

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Linkages

Though a special area management plan, beachfront management plan, or shoreline management plan are not included in the CRS, aspects of these plans can result in points in various sections of the CRS.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

SLR-1 Map and Assess Vulnerability to Sea Level Rise

To better understand and assess local vulnerability to sea level rise, consider actions such as:

- Modeling various "what-if" scenarios to estimate potential vulnerabilities in order to develop sea level rise mitigation priorities.
- Using GIS to map hazard areas, at-risk structures, and associated hazards (e.g., flood and storm surge) to assess high-risk areas.
- Developing an inventory of public buildings and infrastructure that may be particularly vulnerable to sea level rise.
- Adding future conditions hydrology and areas that may be inundated by sea level rise to Digital Flood Insurance Rate Maps (DFIRM).

SLR-2 Manage Development in High-Risk Areas

Local governments can mitigate future losses resulting from sea level rise by regulating development in potential hazard areas through land use planning, including:

- Using zoning, subdivision regulations, and/or a special sea level rise overlay district to designate high-risk areas and specify the conditions for the use and development of specific areas.
- Promoting conservation and management of open space, wetlands, and/or sea level rise boundary zones to separate developed areas from high-hazard areas.
- Prohibiting the redevelopment of areas destroyed by storms or chronic erosion in order to prevent future losses.
- Encouraging compact community design in low-risk areas.
- Establishing setbacks in high-risk areas that account for potential sea level rise.

SRL-3 Prevent Infrastructure Expansion in High-Risk Areas

Future development can be protected from damage resulting from sea level rise through the following:

- Setting guidelines for annexation and service extensions in high-risk areas.
- Locating utilities and critical facilities outside of areas susceptible to sea level rise to decrease the risk of service disruption.

Linkages

- Requiring all critical facilities to be built 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.

SRL-4 Protect Buildings and Infrastructure

Existing structures, infrastructure, and critical facilities can be protected from sea level rise through the following:

- Acquiring and demolishing or relocating structures located in high-risk areas.
- Retrofitting structures to elevate them above potential sea level rise levels.
- Retrofitting critical facilities to be 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.
- Replacing exterior building components with more hazard resistant materials.

SLR-5 Preserve High-Hazard Areas as Open Space

Preserve open space to benefit natural resources and to reduce risk to structures from potential sea level rise. Techniques include:

- Developing an open space acquisition, reuse, and preservation plan targeting hazard areas.
- Developing a land banking program for the preservation and management of the natural and beneficial functions of flood hazard areas.
- Adopting rolling easements along the shoreline to promote natural migration of shorelines.
- Using transfer of development rights to allow a developer to increase densities on another parcel that is not at risk in return for keeping floodplain areas vacant.
- Compensating an owner for partial rights, such as easement or development rights, to prevent a property from being developed.

SLR-6 Protect and Restore Natural Buffers

Natural resources provide floodplain protection, riparian buffers, and other ecosystem services that mitigate sea level rise. It is important to preserve such functionality with the following:

- Examining the appropriate use of beach nourishment, sand scraping, dune-gap plugs, etc., for coastal hazards.
- Implementing dune restoration, plantings (e.g., sea oats), and use of natural materials.
- Examining the appropriate use of sediment-trapping vegetation, sediment mounds, etc., for coastal hazards.

Linkages

- Planting sediment-trapping vegetation to buffer the coast against coastal storms by collecting sediment in protective features such as dunes or barrier islands.
- Performing sand scraping—using bulldozers to deposit the top foot of sand above the high-tide line—to reinforce the beach without adding new sand.
- Using sediment mounds to act as artificial dunes or plugs for natural dune gaps in order to slow the inland progress of storm related wind and water.

SLR-7 Increase Awareness of Sea Level Rise

Improve public awareness of risks due to sea level rise through outreach activities such as:

- Encouraging homeowners to purchase flood insurance.
- Using outreach programs to facilitate technical assistance programs that address measures that citizens can take or facilitate funding for mitigation measures.
- Annually distributing flood protection safety pamphlets or brochures to the owners of property in high-risk areas.
- Educating citizens about safety during flood conditions, including the dangers of driving on flooded roads.
- Using outreach programs to advise homeowners of risks to life, health, and safety.
- Offering GIS hazard mapping online for residents and design professionals.
- Disclosing the location

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

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Does the plan identify the vulnerability of wildlife and habitat to hazards?

You answered:

No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Though a special area management plan, beachfront management plan, or shoreline management plan are not included in the CRS, aspects of these plans can result in points in various sections of the CRS.

3.13.1 Does the municipality have a beach and dune maintenance permit?

You answered:

No

No recommendations

3.14 Does the community have a local ordinance that goes beyond state requirements to protect the following from development or disturbance?

You answered:

Yes

No recommendations

3.14.1 Wetlands?

You answered:

Yes

CRS Suggestions

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.
- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.

Section 450: Stormwater Management: To prevent future development from increasing flood hazards to existing development and to maintain and improve water quality.

- **Watershed Master Plan (WMP):** Up to 315 points for regulating development according to a watershed management master plan (WMP) with 30 points if the plan identifies existing wetlands or other natural open space areas to be preserved from development so that natural attenuation, retention, or detention of runoff is provided.

Sustainable Jersey Suggestions

Natural Resource Protection Ordinances (10 points each)

Linkages

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

3.14.2 Dunes?

You answered:

No

 Things to Consider

Informative Resources:

- ANJEC - [Sample Ordinances for Protecting Significant Coastal Habitats](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Coastal A Zones (CAZ):** Up to 650 points with 25 points awarded if the community prohibits human alteration of any sand dunes or mangroves that would increase flood damage (§60.3(e)(7)). These points are available only if the designated areas include sand dunes or mangroves.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Coastal erosion protection maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion-prone areas as described in CRS Credit for Management of Coastal Erosion Hazards.

Communities working towards Sustainable Jersey Certification should consider the following actions.

Natural Resource Protection Ordinances (10 points each)

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should

implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

3.14.3 Bluffs?

You answered:

✘ No

Things to Consider

Informative Resources:

- ANJEC - [Sample Ordinances for Protecting Significant Coastal Habitats](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Coastal A Zones (CAZ):** Up to 650 points with 25 points awarded if the community prohibits human alteration of any sand dunes or mangroves that would increase flood damage (§60.3(e)(7)). These points are available only if the designated areas include sand dunes or mangroves.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Coastal erosion protection maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion-prone areas as described in CRS Credit for Management of Coastal Erosion Hazards.

Communities working towards Sustainable Jersey Certification should consider the following actions.

Natural Resource Protection Ordinances (10 points each)

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

3.14.4 Eroding Cliffs?

You answered:

✘ No

📌 Things to Consider

Informative Resources:

- ANJEC - [Sample Ordinances for Protecting Significant Coastal Habitats](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Coastal A Zones (CAZ):** Up to 650 points with 25 points awarded if the community prohibits human alteration of any sand dunes or mangroves that would increase flood damage (§60.3(e)(7)). These points are available only if the designated areas include sand dunes or mangroves.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Coastal erosion protection maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion-prone areas as described in CRS Credit for Management of Coastal Erosion Hazards.

Communities working towards Sustainable Jersey Certification should consider the following actions.

Natural Resource Protection Ordinances (10 points each)

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

3.14.4 Stream banks?

You answered:

No

📌 Things to Consider

Informative Resources:

- ANJEC - [Sample Ordinances for Protecting Significant Coastal Habitats](#)

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Coastal A Zones (CAZ):** Up to 650 points with 25 points awarded if the community prohibits human alteration of any sand dunes or mangroves that would increase flood damage (§60.3(e)(7)). These points are available only if the designated areas include sand dunes or mangroves.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Coastal erosion protection maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion-prone areas as described in CRS Credit for Management of Coastal Erosion Hazards.

Communities working towards Sustainable Jersey Certification should consider the following actions.

Natural Resource Protection Ordinances (10 points each)

Natural Resource Protection Ordinances are designed to provide municipalities with the ability to protect various resources within the community from possible harmful effects caused by development. Municipalities with a Natural Resource Inventory (NRI) (or an Environmental Resource Inventory (ERI)) should implement ordinances to protect vulnerable resources outlined in their inventories. Ordinances are the body of public law that implement the goals of the local Master Plan and protect public assets such as special environmental features identified in an NRI or ERI.

Does the community have a Capital Improvement Plan? (If you don't have a CIP, answer this question in regards to your annual budget expenditures).

You answered:

Yes

 CRS Suggestions

Section 510: Floodplain Management Planning: To credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

- **Floodplain Management Planning (FMP):** Up to 382 points for a community wide FMP that follows a 10 step planning process.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Capital improvement program (CIP):** Up to 70 points for having a capital improvement program that corrects drainage problems.

CRS points : 452

3.15.1 Does the plan provide funding for the mitigation goals and actions identified in the Hazard Mitigation Plan?

You answered:

No

No recommendations

3.15.2 Are expenditures on projects that would increase development in high-hazard areas prohibited?

You answered:

No

No recommendations

3.15.3 Are public expenditures limited in high-hazard areas? (e.g. limited to necessary repairs to maintain current public safety needs, service existing residents, etc.)

You answered:

Yes

No recommendations

3.15.4 3.15.4 Does the plan outline a process for how it should be updated?

You answered:

Yes

No recommendations

3.16 **Does the municipality have an Economic Development Plan or Strategy?**

You answered:

✔ Yes

No recommendations

3.16.1 **Is the economic base diversified outside of tourism, maritime industries, and fisheries?**

You answered:

✔ Yes

No recommendations

3.16.2 **Are economic vulnerabilities due to hazards identified?**

You answered:

✔ Yes

No recommendations

3.16.3 **Are these vulnerabilities addresses in the HMP?**

You answered:

✔ Yes

No recommendations

3.16.4 **Are there strategies to address them?**

You answered:

✔ Yes

No recommendations

3.17 **Does the municipality have a long-term recovery or a post disaster redevelopment plan?**

This has not been answered

3.17.1 Does the plan include policies to reduce exposure to hazards? (e.g. limit redevelopment in areas of repeated damage)

You answered:

✔ Yes

No recommendations

Disaster Preparedness and Recovery

4.1 Does the community meet the standards of the National Weather Service StormReady Community program?

You answered:

✔ Yes

CRS Suggestions

Section 610: Flood warning and response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **StormReady community (SRC):** 25 points for designation by the National Weather Service as a StormReady community.

CRS points : 25

4.2 Does the community have an emergency warning system? What is it? ex: Nixle, CodeRed

You answered:

✔ Yes

CRS Suggestions

Section 600: Warning and Response: The activities in this series focus on emergency warnings and response, because adequate notification combined with a plan for how to respond can save lives and prevent and/or minimize property damage. The activities emphasize coordinating emergency management functions with a community's other floodplain management efforts, such as providing public information and implementing a regulatory program. Separate, parallel activities are included for levees (Activity 620) and dams (Activity 630). Credit points are based on threat recognition, planning for a subsequent emergency response, and ongoing testing and maintenance. Up to 790 points.

CRS points : 790

43

Does the community have an early flood warning system that alerts the public that flooding is beginning to occur based upon tide or stream gauges?

You answered:

✓ Yes



CRS Suggestions

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **Flood threat recognition system (FTR):** Up to 75 points for a system that predicts flood elevations and arrival times at specific locations within the community.
- **Emergency warning dissemination (EWD):** Up to 75 points for disseminating flood warnings to the public.

CRS points : 150

44

Does the community relay weather related threats to the public in at least two forms of communication?

You answered:

✓ Yes



CRS Suggestions

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains. 350 points possible.

Section 600: Warning and Response: The activities in this series focus on emergency warnings and response, because adequate notification combined with a plan for how to respond can save lives and prevent and/or minimize property damage. The activities emphasize coordinating emergency management functions with a community's other floodplain management efforts, such as providing public information and implementing a regulatory program. Separate, parallel activities are included for levees (Activity 620) and dams (Activity 630). Credit points are based on threat recognition, planning for a subsequent emergency response, and ongoing testing and maintenance. Up to 790 points.

CRS points : 1140

45

Does the community have an emergency operations plan?

You answered:

✔ Yes

 **CRS Suggestions**

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

CRS points : 395

4.5.1 **Does the plan describe a hierarchy of authority during emergencies?**

You answered:

✔ Yes

 **CRS Suggestions**

Section 610: Flood Warning and Response: to encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

CRS points : 395

4.5.2 **Does the plan identify first responders?**

You answered:

✔ Yes

 **CRS Suggestions**

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

CRS points : 395

4.5.3 **Does the plan include a list of contacts for operators of municipal facilities?**

You answered:

✔ Yes

 CRS Suggestions

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

CRS points : 395

4.3.4 **Is the plan updated as required?**

You answered:

No

 Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.4 **Does the community have a heavy precipitation flooding plan created using information on past flooding events caused by heavy rain?**

You answered:

Yes

 CRS Suggestions

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.4.1 **Does the plan describe where to position roadblocks near frequently flooded areas?**

You answered:

Yes

 CRS Suggestions

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.6.2 **Does the plan involve alerting residents using notification systems to avoid certain flood prone areas when heavy precipitation is expected?**

You answered:

✔ Yes

 **CRS Suggestions**

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.7 **Does the community have a designated emergency operations center?**

You answered:

✔ Yes

 **CRS Suggestions**

Section 610: Flood warning and response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **StormReady community (SRC):** 25 points for designation by the National Weather Service as a StormReady community.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure threat recognition system (LFR):** Up to 30 points for having a system to advise the emergency manager when there is a threat of a levee's failure or overtopping.

CRS points : 55

4.7.1 **If so, is it located outside of flood-hazard areas?**

You answered:

✘ No

No recommendations

4.7.3 **Does it have a mobile system or back up location?****You answered:**

✔ Yes

No recommendations

4.7.2 **Is it designed to withstand high winds?****You answered:**

✔ Yes

No recommendations

4.7.4 **Does it have a generator?****You answered:**

✔ Yes

No recommendations

4.8 **Does the community have a designated storm shelter either in or outside its municipal boundaries?****You answered:**

✔ Yes

CRS Suggestions

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Protection of critical facilities (PCF):** Up to 80 points for protecting facilities that are critical to the community.

Section 610: Flood warning and response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate

floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **Emergency warning dissemination (EWD):** Up to 75 points for disseminating flood warnings to the public.
- **Critical facilities planning (CFP):** Up to 75 points for coordinating flood warning and response activities with operators of critical facilities.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure threat recognition system (LFR):** Up to 30 points for having a system to advise the emergency manager when there is a threat of a levee's failure or overtopping.
- **Levee failure response operations (LFO):** Up to 30 points for response actions to be undertaken to reduce or prevent threats to health, safety, and property.

Section 630: Dams: To encourage states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

- **Dam failure warning (DFW):** Up to 35 points for disseminating the warning to the public.

CRS points : 430

Hazard Mitigation Suggestions

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

An All-Hazards Mitigation Plan in development should designate a storm shelter either within or outside of the community's municipal boundaries; an existing plan, if lacking, can add this element when updating the plan.

4.3.1 **Does the community publicize the location of shelters prior to the threat of a storm?**

You answered:

✓ Yes

No recommendations

4.3.2 **Is there an established memorandum of agreement with a neighboring community or county to provide your constituents shelter?**

You answered:

✓ Yes

No recommendations

4.8.3 Does the community have a memorandum of agreement to provide sheltering for a neighboring community's constituents?

You answered:

✔ Yes

No recommendations

4.8.4 Are shelters equipped for special needs, pets, etc?

You answered:

✔ Yes

No recommendations

4.8.5 Is the storm shelter located outside of flood hazard areas?

You answered:

✘ No

No recommendations

4.8.6 Is the storm shelter located outside of the possible extent for storm surge inundation because flood hazard areas are not completely inclusive of all storm surge scenarios?

You answered:

✘ No

No recommendations

4.8.7 Are storm shelters designed to withstand high wind impacts?

You answered:

✘ No

No recommendations

4.8.8 Does the shelter capacity adequately service the community population, including seasonal tourists?

You answered:

✘ No

No recommendations

4.9 Does the community have an evacuation plan?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 330: Outreach Projects: To provide the public with information needed to increase flood hazard awareness and to motivate actions to reduce flood damage, encourage flood insurance coverage, and protect the natural functions of floodplains.

- **Outreach projects (OP):** Up to 200 points for designing and carrying out public outreach projects. Credits for individual projects may be increased if the community has a Program for Public Information (PPI).
- **Flood response preparations (FRP):** Up to 50 points for having a pre-flood plan for public information activities ready for the next flood. Credits for individual projects may be increased by the PPI multiplier.

Section 350: Flood Protection Information: To provide the public with information about flood protection that is more detailed than that provided through outreach projects.

- **Flood protection website (WEB):** Up to 76 points for providing flood protection information via the community's website. An additional 29 points are provided if the website is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Other higher standard (OHS):** Up to 100 points for other regulations Section 610: Flood Warning and Response: to encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property
- **Emergency warning dissemination (EWD):** Up to 75 points for disseminating flood warnings to the public.
- **Flood response operations (FRO):** Up to 115 points with 10 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a flood warning is issued and for having a plan to provide transportation to secure locations
- **Critical facilities planning (CFP):** Up to 75 points for coordinating flood warning and response activities with operators of critical facilities.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure warning (LFW):** Up to 50 points for disseminating the warning to the public.
- **Levee failure response operations (LFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation

assistance when a levee failure warning is issued and for having a plan to provide transportation to secure locations.

Section 630: Dams: To encourage states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

- **Dam failure warning (DFW):** Up to 35 points for disseminating the warning to the public.
- **Dam failure response operations (DFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a dam failure warning is issued, and for having a plan to provide transportation to secure locations.

4.9.1 **Are neighboring municipalities that would impact evacuation involved in the planning process?**

You answered:

✘ No

No recommendations

4.9.2 **Are municipal responsibilities for evacuation clearly defined?**

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.10 **Does the plan identify the necessary time frame to evacuate your residents and vacationers outside of storm hazard areas?**

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.3.4 Does the plan identify where evacuation routes are prone to flooding?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.3.5 Is there more than one route identified to evacuate your community?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.3.6 Does the plan identify the conditions that would spur a lane reversal?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.9.7 Does the plan identify local and state evacuation assistance programs for the following special needs:

- Hospitals
- Nursing Homes
- Prisons
- Residents without Personal Transportation
- Elderly
- Disabled

You answered:

No

Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property.

- **Flood response operations (FRO):** Up to 115 points with 10 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a flood warning is issued and for having a plan to provide transportation to secure locations.

Section 620: Levees: To encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

- **Levee failure response operations (LFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a levee failure warning is issued and for having a plan to provide transportation to secure locations.

Section 630: Dams: To encourage states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

- **Dam failure response operations (DFO):** Up to 30 points with 5 points awarded for maintaining a data base of people with special needs who require evacuation assistance when a dam failure warning is issued, and for having a plan to provide transportation to secure locations.

4.9.8 Does the plan include the moving of emergency equipment out of the floodplain?

You answered:**✘ No****! Things to Consider**

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 610: Flood Warning and Response: To encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. Up to 395 points.

4.10

Does the municipality have a volunteer Community Emergency Response Team (CERT)?**You answered:****✘ No****! Things to Consider**

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community. For information about forming a Citizen Emergency Response Team, click [here](#).

4.11

Does the community have a Continuity of Operations Plan?**You answered:****✘ No**

No recommendations

4.11.1

Does the plan provide guidance on post-disaster waste management and debris removal?**You answered:****✘ No**

No recommendations

4.11.2 **Are post-disaster debris staging areas identified and approved?**

You answered:

✘ No

No recommendations

4.11.3 **Is machinery for debris removal located outside of flood hazard areas?**

You answered:

✘ No

No recommendations

4.11.4 **Does the community have a service agreement in place with contractors for post-disaster cleanup?**

You answered:

✘ No

No recommendations

4.11.5 **Are routes to waste disposal facilities passable in the event of flood?**

You answered:

✘ No

No recommendations

4.12 **In the event of a disaster, are procedures defined to conduct habitability and substantial damage assessments?**

You answered:

✘ No

No recommendations

4.12.1 **Are habitability and damage assessors trained?**

You answered:

✔ Yes

No recommendations

4.12.2 **Are habitability and damage assessors non-residents?**

You answered:

✔ Yes

No recommendations

4.13 **Does the community collect and retain elevation certificates?**

You answered:

✔ Yes

No recommendations

4.13.1 **Does the community store elevation certificates outside of flood-hazard areas?**

You answered:

✘ No

No recommendations

4.13.2 **Does the community digitally store elevation certificates and keep them backed up?**

You answered:

✘ No

No recommendations

4.14 **Does the community have a Post-Disaster Redevelopment Plan?**

You answered:

✔ Yes

 **CRS Suggestions**

Though a Post-Disaster Redevelopment Plan is not awarded points through the CRS, certain aspects of a community's Plan may earn points.

4.14.1 **Does the plan identify redevelopment opportunities outside of flood hazard areas?**

You answered:

✓ Yes

 CRS Suggestions

Though a Post-Disaster Redevelopment Plan is not awarded points through the CRS, certain aspects of a community's Plan may earn points.

4.14.2 **Does the plan advocate the use of Advisory Flood Maps to define post-disaster redevelopment building elevations?**

You answered:

✓ Yes

 CRS Suggestions

Though a Post-Disaster Redevelopment Plan is not awarded points through the CRS, certain aspects of a community's Plan may earn points.

4.14.3 **Does the plan identify opportunities to retrofit or relocate existing structures or infrastructure in hazard prone areas?**

You answered:

✓ Yes

 CRS Suggestions

Though a Post-Disaster Redevelopment Plan is not awarded points through the CRS, certain aspects of a community's Plan may earn points.

4.14.4 **Does the plan require retrofitting or relocation of existing structures or infrastructure in hazard prone areas?**

You answered:

✓ Yes

 CRS Suggestions

Though a Post-Disaster Redevelopment Plan is not awarded points through the CRS, certain aspects of a community's Plan may earn points.

Does the plan utilize risk and vulnerability mapping to determine areas unfit for future development?

You answered:

✓ Yes

No recommendations

Hazard Mitigation Implementation

3.1 Has the community proposed the relocation of public buildings, critical facilities, or infrastructure out of flood hazard areas?

You answered:

✗ No

Things to Consider

Informative Resources:

What Does Tidal Flooding Look Like?

- Animation shows the causes of and strategies to help communities impacted by tidal flooding.

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 520: Acquisition and Relocation: To encourage communities to acquire, relocate, or otherwise clear existing buildings out of the flood hazard area.

- **Critical facilities (bCF):** Points awarded for facilities that have been acquired or relocated.

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

MU-12 Protect Structures

(FEMA Resources/Publications

FEMA 577, P-798 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2739>)

Damage to structures can be prevented through the following actions:

- Acquiring or relocating structures located in hazard areas.
- Moving vulnerable structures to a less hazardous location.
- Relocating or retrofitting public buildings located in high-hazard areas.
- Relocating or retrofitting endangered public housing units in high hazard areas.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.4.a. The plan must include a mitigation strategy that 1) analyzes actions and/or projects that the jurisdiction considered to reduce the impacts of hazards identified in the risk assessment, and 2) identifies the actions and/or projects that the jurisdiction intends to implement. Mitigation actions and projects means a hazard mitigation action, activity or process (for example, adopting a building code) or it can be a physical project (for example, elevating structures or retrofitting critical infrastructure) designed to reduce or eliminate the long term risks from hazards. This sub-element can be met with either actions or projects, or a combination of actions and projects.

3.2 **Has the community used its All-Hazard Mitigation Plan to propose retrofitting public buildings, critical facilities, and other infrastructure to withstand flood damage?**

You answered:

✘ No

📌 Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 530: Flood Protection: To protect buildings from flood damage by retrofitting the buildings so that they suffer no or minimal damage when flooded, and/or constructing small flood control projects that reduce the risk of flood waters' reaching the buildings.

- **Flood protection project technique used (TU_):** Credit is provided for retrofitting techniques or flood control techniques. Retrofitting technique used: Points are provided for the use of elevation (TUE), dry floodproofing (TUD), wet floodproofing (TUW), protection from sewer backup (TUS), and barriers (TUB) Structural flood control technique used: Points are provided for the use of channel modifications (TUC), and storage facilities (TUF).

FEMA has released guidance on incorporating sea level rise into Hazard Mitigation projects.

<https://www.fema.gov/media-library-data/1387903260455-e6faefb55a3f69d866994fb036625527/HMA%20Sea%20Level%20Rise%20FAQ%2012-23-2013.pdf>

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

MU-12 Protect Structures

(FEMA Resources/Publications)

FEMA 577, P-798 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2739>

Linkages

Damage to structures can be prevented through the following actions:

- Relocating or retrofitting public buildings located in high-hazard areas.
- Relocating or retrofitting endangered public housing units in high hazard areas.
- Retrofitting fire and police stations to become hazard resistant.

MU-13 Protect Infrastructure

and Critical Facilities

(FEMA Resources/Publications

FEMA 345, 476 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1472>)

Infrastructure and critical facilities can be protected from damage by the following:

- Incorporating mitigation retrofits for public facilities into the annual capital improvements program.
- Engineering or retrofitting roads and bridges to withstand hazards.
- Relocating or undergrounding electrical infrastructure.
- Installing quick-connect emergency generator hook-ups for critical facilities

SRL-4 Protect Buildings and Infrastructure

Existing structures, infrastructure, and critical facilities can be protected from sea level rise through the following:

- Retrofitting structures to elevate them above potential sea level rise levels.
- Retrofitting critical facilities to be 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher.
- Replacing exterior building components with more hazard resistant materials.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Communities that are part of a countywide Multi-Jurisdictional Hazard Mitigation Plan update should consider this element as specified by the FEMA Local Mitigation Plan Review Guide.

Element C.4.a. The plan must include a mitigation strategy that 1) analyzes actions and/or projects that the jurisdiction considered to reduce the impacts of hazards identified in the risk assessment, and 2) identifies the actions and/or projects that the jurisdiction intends to implement. Mitigation actions and projects means a hazard mitigation action, activity or process (for example, adopting a building code) or it can be a physical project (for example, elevating structures or retrofitting critical infrastructure) designed to reduce or eliminate the long term risks from hazards. This sub-element can be met with either actions or projects, or a combination of actions and projects.

5.3 Do municipal codes reflect the state's 1-foot Freeboard above base flood elevation?

You answered:

✔ Yes

 CRS Suggestions

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Freeboard (FRB):** Up to 500 points for a freeboard requirement.

CRS points : 500

 Hazard Mitigation Suggestions

FEMA has released guidance on incorporating sea level rise into Hazard Mitigation projects.

<https://www.fema.gov/media-library-data/1387903260455-e6faefb55a3f69d866994fb036625527/HMA%20Sea%20Level%20Rise%20FAQ%2012-23-2013.pdf>

5.4 Do municipal building codes exceed the state's 1-foot Freeboard above base flood elevation?

You answered:

✔ Yes

 CRS Suggestions

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Freeboard (FRB):** Up to 500 points for a freeboard requirement.

CRS points : 500

 Hazard Mitigation Suggestions

FEMA has released guidance on incorporating sea level rise into Hazard Mitigation projects.

<https://www.fema.gov/media-library-data/1387903260455-e6faefb55a3f69d866994fb036625527/HMA%20Sea%20Level%20Rise%20FAQ%2012-23-2013.pdf>

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-9 Manage the Floodplain Beyond Minimum Requirements

(FEMA Resources/Publications FEMA 100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>, 209<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1726>, 213<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1636>, 268<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>, 480<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1443>; FIA-15A)

In addition to participation in NFIP, implementing good floodplain management techniques that exceed minimum requirements can help minimize flood losses. Examples include:

- Extending the freeboard requirement past the mapped floodplain to include an equivalent land elevation.
- Offering incentives for building above the required freeboard minimum (code plus).

SU-3 Consider Subsidence in Building Design

If subsidence is considered during building design, future damage may be prevented. Potential actions include:

- Including potential subsidence in freeboard calculations for buildings in flood-prone areas.

F-4 Adopt and Enforce Building Codes and Development Standards

(FEMA Resources/Publications FEMA 100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>, 268 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>, P-762 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3647>)

The use of building codes and development standards can ensure structures are able to withstand flooding. Potential actions include:

- Adding or increasing "freeboard" requirements (feet above base flood elevation) in the flood damage ordinance.
- Setting the design flood elevation at or above the historical high water mark if it is above the mapped base flood elevation.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

- 55 **Do municipal height restrictions exist that limit the ability of homeowners to increase their freeboard?**

You answered:

✓ Yes

No recommendations

45 Have building and permitting officials completed training in FEMA's Coastal Construction Manual?

You answered:

✘ No

! Things to Consider

The 2011 CCM, 4th Ed. (FEMA P-55), is a 2-volume publication that provides a comprehensive approach to planning, siting, designing, constructing, & maintaining homes in the coastal environment.

Volume I provides information about hazard identification, siting decisions, regulatory requirements, economic implications, & risk management.

Volume II contains in-depth descriptions of design, construction, & maintenance practices that, when followed, will increase the durability of residential buildings in the harsh coastal environment and reduce economic losses associated with coastal natural disasters.

For more information and to download FEMA's Coastal Construction Manual, click [here](#).

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 430: Higher Regulatory Standards: To credit regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP).

- **Regulations administration (RA):** Up to 67 points for having trained staff and administrative procedures that meet specified standards.

<http://www.fema.gov/media-library/assets/documents/3293>

57 Does the municipality provide property owners with guidelines to retrofit existing development for flood and wind risks?

You answered:

✔ Yes

🌟 CRS Suggestions

Section 360: Flood Protection Assistance: To provide one-on-one help to people who are interested in protecting their property from flooding.

- **Property protection advice (PPA):** Up to 25 points for providing one-on-one advice about property protection (such as retrofitting techniques and drainage improvements). An additional 15 points are provided if the assistance program is part of a Program for Public Information (credited under Activity 330 (Outreach Projects)).

Section 530: Flood Protection: To protect buildings from flood damage by retrofitting the buildings so that they suffer no or minimal damage when flooded, and/or

constructing small flood control projects that reduce the risk of flood waters' reaching the buildings.

- **Flood protection project technique used (TU_):** Credit is provided for retrofitting techniques or flood control techniques. Retrofitting technique used: Points are provided for the use of elevation (TUE), dry floodproofing (TUD), wet floodproofing (TUV), protection from sewer backup (TUS), and barriers (TUB) Structural flood control technique used: Points are provided for the use of channel modifications (TUC), and storage facilities (TUF).

CRS points : 40

Hazard Mitigation Suggestions

FEMA has released guidance on incorporating sea level rise into Hazard Mitigation projects.

<https://www.fema.gov/media-library-data/1387903260455-e6faefb55a3f69d866994fb036625527/HMA%20Sea%20Level%20Rise%20FAQ%2012-23-2013.pdf>

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

SW-1 Adopt and Enforce Building Codes

(FEMA Resources/Publications FEMA P-85 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1577>, P-804 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4569>)

Adopt regulations governing residential construction to prevent wind damage. Examples of appropriate regulations are:

- Adopting the International Building Code (IBC) and International Residential Code (IRC).
- Adopting standards from International Code Council (ICC)-600 Standard for Residential Construction in High-Wind Regions.
- Reviewing building codes and structural policies to ensure they are adequate to protect older structures from wind damage.
- Requiring or encouraging wind engineering measures and construction techniques that may include structural bracing, straps and clips, anchor bolts, laminated or impact-resistant glass, reinforced pedestrian and garage doors, window shutters, waterproof adhesive sealing strips, or interlocking roof shingles.
- Requiring tie-downs with anchors and ground anchors appropriate for the soil type for manufactured homes.
- Prohibiting the use of carports and open coverings attached to manufactured homes.
- Requiring the use of special interlocking shingles designed to interlock and resist uplift forces in extreme wind conditions to reduce damage to a roof or other structures.
- Improving nailing patterns.

Linkages

- Requiring building foundation design, braced elevated platforms, and protections against the lateral forces of winds and waves.
- Requiring new masonry chimneys greater than 6 feet above a roof to have continuous reinforced steel bracing.
- Requiring structures on temporary foundations to be securely anchored to permanent foundations.

SW-2 Promote or Require Site and Building Design Standards to Minimize Wind Damage

(FEMA Resources/Publications FEMA P-499 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2138>, 550 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1853>)

Damage associated with severe wind events can be reduced or prevented if considered during building and site design. Examples include the following:

- Using natural environmental features as wind buffers in site design.
- Incorporating passive ventilation in the building design.
- Incorporating passive ventilation in the site design. Passive ventilation systems use a series of vents in exterior walls or at exterior windows to allow outdoor air to enter the home in a controlled way.
- Encouraging architectural designs that limit potential for wind-borne debris.
- Improving architectural design standards for optimal wind conveyance.
- Encouraging wind-resistant roof shapes (e.g., hip over gable).

SW-5 Retrofit Residential Buildings

(FEMA Resources/Publications FEMA 320 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5788>, 361 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1657>, 453 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1910>, P-499 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2138>, P-804 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4569>)

The following types of modifications or retrofits to existing residential buildings can reduce future wind damage:

- Improving the building envelope.
- Installing hurricane shutters or other protective measures.
- Retrofitting gable end walls to eliminate wall failures in high winds.
- Replacing existing non-ductile infrastructure with ductile infrastructure to reduce their exposure to hazardous events.
- Retrofitting buildings with load-path connectors to strengthen the structural frames.
- Installing safe rooms.

Linkages

- Reinforcing garage doors.
- Inspecting and retrofitting roofs to adequate standards to provide wind resistance.

SW-7 Increase Severe Wind Risk Awareness

(FEMA Resources/Publications FEMA P-431 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1563>, P-804 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4569>)

Improve public awareness of severe wind through outreach activities such as:

- Educating homeowners on the benefits of wind retrofits such as shutters, hurricane clips, etc.
- Instructing property owners on how to properly install temporary window coverings before a storm.
- Educating design professionals to include wind mitigation during building design.

T-2 Require Wind-Resistant Building Techniques

(FEMA Resources/Publications FEMA P-804 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4569>)

Require or encourage wind engineering measures and construction techniques that may include the following:

- • Structural bracing
- • Straps and clips
- • Anchor bolts
- • Laminated or impact-resistant glass
- • Reinforced pedestrian and garage doors
- • Window shutters
- • Waterproof adhesive sealing strips
- • Interlocking roof shingles

Also, improve the selection of building materials so that wind resistant materials are more readily available to the public. Consult guidance from ICC-600 Standard for Residential Construction in High-Wind Regions.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Does the municipality utilize any of the following tools to manage development in hazard prone areas?

You answered:

✔ Yes

 CRS Suggestions

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.
- **Deed restrictions (DR):** Up to 50 points extra credit for legal restrictions that ensure that parcels credited for OPS will never be developed.
- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.
- **Special flood-related hazards open space (SHOS):** Up to 50 points if the OSP credited parcels are subject to one of the special flood-related hazards or if areas of special flood related hazard are covered by low density zoning regulations.
- **Open space incentives (OSI):** Up to 250 points for local requirements and incentives that keep flood-prone portions of new development open.
- **Natural shoreline protection (NSP):** Up to 120 points for programs that protect natural channels and shorelines.

CRS points : 2,270

5.3.1 **Transfer of development rights or purchase of development rights**

You answered:

✔ Yes

No recommendations

5.3.2 **Conservation overlay districts or cluster development**

You answered:

✔ Yes

No recommendations

5.3.3 **Zoning for open or recreational space**

You answered:

✔ Yes

No recommendations

5.3.4 **Riparian and/or wetland buffer ordinances**

You answered:

✓ Yes

No recommendations

5.9

Does the municipality use land acquisition programs to buy-out or purchase land conservation easements in hazard prone areas?

You answered:

✓ Yes

 **CRS Suggestions**

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.

 **Sustainable Jersey Suggestions**

Communities working towards Sustainable Jersey Certification should consider the following actions.

Conservation Easements (10-15 points each)

A conservation easement is a restriction placed on a piece of property that limits the uses of the land so that natural resources and open space are protected. A conservation easement constitutes a legally binding agreement that limits certain types of uses or prevents development from taking place on the land in perpetuity, regardless of ownership. The agreement is made between the landowner and a government entity, private individual, or a land trust. The three components of the Municipal Conservation Easement Stewardship Program are Easement Inventory and Outreach, Easement Inspections and Evaluations, and Easement Stewardship. While municipalities can earn 10 and 15 points for each of the first two actions respectively, the guidance for the stewardship component is still under development.

**SJ points : 10-15
points each**

 **Hazard Mitigation Suggestions**

ER-4 Remove Existing Buildings and Infrastructure from Erosion Hazard Areas

(FEMA Resources/Publications FEMA P-55 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1671>)

To prevent damage to buildings and infrastructure from erosion, consider acquiring and demolishing or relocating at-risk buildings and infrastructure and enforcing permanent restrictions on development after land and structure acquisition.

F-12 Remove Existing Structures from Flood Hazard Areas

Communities may remove structures from flood-prone areas to minimize future flood losses by acquiring and demolishing or relocating structures from voluntary property owners and preserving lands subject to repetitive flooding.

SRL-4 Protect Buildings and Infrastructure

Existing structures, infrastructure, and critical facilities can be protected from sea level rise through the following:

- Acquiring and demolishing or relocating structures located in high-risk areas.

MU-12 Protect Structures

(FEMA Resources/Publications FEMA 577 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2739>, P-798 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4347>)

Damage to structures can be prevented through the following actions:

- Acquiring or relocating structures located in hazard areas.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

5.3.1 **Green Acres and Blue Acres**

You answered:

✓ Yes

No recommendations

5.3.2 **Coastal and Estuarine Land Conservation Program (CELCP)**

You answered:

✓ Yes

No recommendations

5.3.3 **The Nature Conservancy**

You answered:

✓ Yes

No recommendations

5.9.4 **The Trust for Public Lands**

You answered:

✓ Yes

No recommendations

5.9.5 **New Jersey Conservation Foundation**

You answered:

✓ Yes

No recommendations

5.9.6 **Other?**

You answered:

✗ No

No recommendations

5.10 **Does the community utilize impact fees, municipal occupancy taxes or user fees to acquire properties in hazard areas? (Open space tax?)**

You answered:

✓ Yes

No recommendations

5.11 **Does the municipality engage in dune and/or wetland restoration?**

You answered:

✓ Yes

 **CRS Suggestions**

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.

Linkages

- **Natural functions open space (NFOS):** Up to 350 points extra credit for OPS-credited parcels that are preserved in or restored to their natural state.

Section 540: Drainage System Maintenance: To ensure that the community keeps its channels and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

- **Coastal erosion protection maintenance (EPM):** Up to 100 points for maintaining erosion protection programs in communities with coastal erosion-prone areas as described in CRS Credit for Management of Coastal Erosion Hazards.

CRS points : 1900

Hazard Mitigation Suggestions

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

ER-5 Stabilize Erosion Hazard Areas

To stabilize slopes susceptible to erosion, consider options such as:

- Preventing erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile fabric.
- Stabilizing cliffs with terracing or plantings of grasses or other plants to hold soil together.
- Prohibiting removal of natural vegetation from dunes and slopes.
- Planting mature trees in the coastal riparian zone to assist in dissipation of the wind force in the breaking wave zone.
- Using a hybrid of hard/soft engineering techniques (i.e., combine low-profile rock, rubble, oyster reefs, or wood structures with vegetative planting or other soft stabilization techniques).
- Implementing marine riparian habitat reinstatement or revegetation.
- Using a rock splash pad to direct runoff and minimize the potential for erosion.
- Using bioengineered bank stabilization techniques.

F-20 Protect and Restore Natural Flood Mitigation Features

(FEMA Resources/Publications FEMA 100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>, 268 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>)

Natural resources provide floodplain protection, riparian buffers, and other ecosystem services that mitigate flooding. It is important to preserve such functionality with the following:

- Protecting and enhancing landforms that serve as natural mitigation features (i.e., riverbanks, wetlands, dunes, etc.).

Linkages

- Using vegetative management, such as vegetative buffers, around streams and water sources.
- Protecting and preserving wetlands to help prevent flooding in other areas.
- Establishing and managing riparian buffers along rivers and streams.
- Retaining natural vegetative beds in stormwater channels.
- Retaining thick vegetative cover on public lands flanking rivers.

SLR-6 Protect and Restore Natural Buffers

Natural resources provide floodplain protection, riparian buffers, and other ecosystem services that mitigate sea level rise. It is important to preserve such functionality with the following:

- Examining the appropriate use of beach nourishment, sand scraping, dune-gap plugs, etc., for coastal hazards.
- Implementing dune restoration, plantings (e.g., sea oats), and use of natural materials.
- Examining the appropriate use of sediment-trapping vegetation, sediment mounds, etc., for coastal hazards.
- Planting sediment-trapping vegetation to buffer the coast against coastal storms by collecting sediment in protective features such as dunes or barrier islands.
- Performing sand scraping—using bulldozers to deposit the top foot of sand above the high-tide line—to reinforce the beach without adding new sand.
- Using sediment mounds to act as artificial dunes or plugs for natural dune gaps in order to slow the inland progress of storm related wind and water.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

3.11.1 **Does the community use beach badge fees to pay for dune plantings?**

You answered:

No

No recommendations

3.11.2 **Are dune plantings diversified beyond dune grass?**

You answered:

No

No recommendations

5.12 Does the community utilize impact fees, accommodation taxes or user fees to pay for dune and/or wetland restoration?

You answered:

✔ Yes

No recommendations

5.13 Has the community used beach nourishment or created engineered dune systems?

You answered:

✘ No

No recommendations

5.14 Has the community installed levee systems that meet the NFIP/CRS standards?

You answered:

✘ No

! Things to Consider

Communities that are members of the CRS should look into achieving this task in order to earn CRS credit points and gain a better community rating.

Section 420: Open Space Preservation: To prevent flood damage by keeping flood-prone lands free of development, and protect and enhance the natural functions of floodplains.

- **Open space preservation (OSP):** Up to 1,450 points for keeping land vacant through ownership or regulations.
- **Open space incentives (OSI):** Up to 250 points for local requirements and incentives that keep flood-prone portions of new development open.

5.15 Has the community installed backflow preventors on stormwater outfalls?

You answered:

✘ No

No recommendations

5.16 Has the community installed stormwater pumps?

You answered:

✘ No

No recommendations

5.17 **Has the community proposed or raised roadways?**

You answered:

 **No**

No recommendations

5.18 **Has the community used any of the following grant programs to implement mitigation projects?**

You answered:

 **Yes**

No recommendations

5.18.1 **Hazard Mitigation Grant Program**

You answered:

 **Yes**

No recommendations

5.18.2 **Pre-Disaster Mitigation**

You answered:

 **No**

No recommendations

5.18.3 **Flood Mitigation Assistance**

You answered:

 **Yes**

No recommendations

5.18.4 **Repetitive Loss Claims**

You answered:

 **No**

! Things to Consider

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-9 Manage the Floodplain Beyond Minimum Requirements

(FEMA Resources/Publications FEMA
100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>,
209 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1726>,
213 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1636>,
268 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>,
480 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1443>; FIA-
15A <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1741>)

In addition to participation in NFIP, implementing good floodplain management techniques that exceed minimum requirements can help minimize flood losses. Examples include:

- Annually notifying the owners of repetitive loss properties of Flood Mitigation Assistance funding.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

5.10.5 **Severe Repetitive Loss**

You answered:

✘ No

! Things to Consider

Communities that are looking to mitigate hazards should explore the following options cited by FEMA's "Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards".

F-9 Manage the Floodplain Beyond Minimum Requirements

(FEMA Resources/Publications FEMA
100 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1626>,
209 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1726>,
213 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1636>,
268 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1419>,

Linkages

480 <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1443>; FIA-15A <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1741>)

In addition to participation in NFIP, implementing good floodplain management techniques that exceed minimum requirements can help minimize flood losses. Examples include:

- Annually notifying the owners of repetitive loss properties of Flood Mitigation Assistance funding.

http://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

5,18,6 **Community Development Block Grants**

You answered:

✓ Yes

No recommendations

5,18,7 **NJ DEP Coastal Management Program**

You answered:

✓ Yes

No recommendations

5,18,3 **Other?**

You answered:

✓ Yes

No recommendations