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Floodplain Management Plan

2017 Progress Report

Community Rating System (CRS)

Monmouth Beach Borough
Monmouth County, New Jersey

PREPARED BY:

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Name of the CRS Floodplain Management Plan

Borough of Monmouth Beach Floodplain Management Plan (November 2016) and Monmouth County Multi- Jurisdictional Hazard Mitigation Plan (April 2015).

Plan Adoption History

The Borough of Monmouth Beach Floodplain Management Plan was adopted by the Planning Board as an amendment to the Master Plan on October 18, 2016 and by the Mayor and Commissioners as per Resolution R-88-16 on October 25, 2016. The Monmouth County Office of Emergency Management also adopted a Multi-Jurisdictional Natural Hazard Mitigation Plan on April 7, 2009. The Borough was a participating jurisdiction in the preparation of this plan and its subsequent update. This plan update was completed in Spring 2015, with input from various municipalities including the Borough of Monmouth Beach and was approved by FEMA on April 14, 2015. Annual reviews of the Monmouth County Multi-Jurisdictional Natural Hazard Mitigation Plan were completed in March of 2016 and March of 2017.

In June of 2018 the new FIRM's became effective for the Borough of Monmouth Beach. Attached is a map showing the new Effective Flood Hazard Areas and a map showing the changes in the flood hazard area.

Locations Where Copies are Available for Review

Copies of the Borough's Flood Plain Management Plan, dated November 2016, are on file in the Borough Clerk's office, located at 18 Willow Avenue, Monmouth Beach, New Jersey.

A copy of the adopted Monmouth County Multi-Jurisdictional Natural Hazard Mitigation Plan, approved by FEMA on April 14, 2015, is also on file in the Borough Clerk's office.

Flooding that Occurred During the 2016- 2017 Report

Regular flooding has occurred during heavy rainfalls specifically at high tide due to the tide-influenced limiting of full drainage capacity in the storm sewers. While no tropical storms have made landfall during 2017; several storms tracked up the east coast causing localized flooding and beach erosion.

Impacts of the Floods on the Repetitive Loss Area

No storms over the past year have resulted in additional claims in Repetitive Loss Areas.

List of Plan Accomplishments During the Previous Year

See accompanying Status Report for details of the Borough's accomplishments during the last twelve (12) months to the previously adopted Borough Floodplain Management Plan. The attached status report also provides the status of the Borough's recent flood mitigation actions.



Objectives Not Reached and Implementation Behind Schedule

As noted on the attached status report, the Borough is on schedule with respect to the implementation of various goals and recommendations outlined in the Borough's Floodplain Management Plan. Please see the accompanying Status Report for further details regarding any objectives not reached.

New Projects to be Started or Revisions to the Recommendations or Objectives

Revisions to the recommendations are detailed in the accompanying Status Report.

Progress Reports Discussed and/or Made Available at a Public Meeting

A meeting of the Flood Advisory Committee was held on Wednesday, September 19, 2018 at 3:00 p.m. at the Borough Municipal Office Building. In attendance were the following:

- Judith Wilson, Borough Administrator
- Joseph Chirichello, Superintendent of Public Works
- Sergeant Aaron Rock, Monmouth Police and Deputy OEM Coordinator
- Randy Van Bloom, Deputy OEM Coordinator
- Nancy Britton, Technical Assistant Construction Department
- Bonnie Heard, Borough Engineer

The meeting concluded at 3:30 p.m.

The report will be discussed and made available to the public at the September 25, 2018 meeting of the Borough Commissioners that will be held at 6:00 p.m. in the Monmouth Beach First Aid Building, 26 Beach Road, Monmouth Beach.

We Have Provided Copies of this Report to our Governing Board and Local Media

Copies of this progress report have been provided to members of the Monmouth Beach Borough Commissioners and the Monmouth Beach Planning Board and have been posted on the Borough's website for public review and comment.

Information Contact:

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Bonnie Heard, Borough Engineer, (732) 671-6400



Floodplain Management Plan Status Report 2017

Introduction

The Borough of Monmouth Beach experiences regular flooding as a result of heavy rain, surface runoff, tidal events, hurricanes, and tropical storms. The Borough is currently evaluating the impact of these storms and the significant rainfall that occurred in the last year.

In the last year, the Borough has been implementing its Floodplain Management goals and recommendations. The Borough was a participating community in the preparation of this plan. The Borough and its officials have been working all year to achieve the goals outlined in the plan.

Status of Flood Mitigation Actions

The previously adopted Borough of Monmouth Beach Floodplain Management Plan was adopted on October 25, 2016. This plan included nine (9) goals. The following is a summary of each goal from this plan and the status of same:

Goal 1: Secure safety from flood, due to surge, stormwater, and sea level rise, fire (as a result of flood situations), panic and other natural and man-made disasters.

This continues to be a floodplain management goal for the Borough of Monmouth Beach.

Goal 2: Reduce flood damage, including damage to life and property.

This continues to be a floodplain management goal for the Borough of Monmouth Beach.

Goal 3: Manage and minimize increases in stormwater runoff from any new development or redevelopment.

This continues to be a goal of the Borough's Floodplain Management Plan. The Borough recently completed an Impervious Coverage Study to determine what, if any, impacts current zoning regulations and development trends.

Goal 4: Maintain and enhance groundwater recharge.

This continues to be a goal of the Borough's Floodplain Management Plan.

Goal 5: Increase public awareness of stormwater management through public education.

This continues to be a floodplain management goal for the Borough of Monmouth Beach.

Goal 6: Protect natural and environmental resources including floodways, wetlands, marsh areas and areas suitable for public and quasi-public recreational activities; and support resiliency to storm and other natural hazard events.

This continues to be a goal of the Borough's Floodplain Management Plan.



Goal 7: Promote the conservation of open space and valuable natural resources, including trees and vegetation, and prevent degradation of the environment through improper use of land.

This continues to be a goal of the Borough's Floodplain Management Plan.

Goal 8: Promote public awareness of hazard mitigation and resiliency issues and provide adequate resources to Borough residents and business owners so they are properly informed of the natural hazards they face and the precautions they can take to protect their properties.

This continues to be a goal of the Borough's Floodplain Management Plan.

Goal 9: Promote regional coordination between Local, County, State, and Federal Governments and OEMs, FEMA, and the National Flood Insurance Program; to identify community vulnerabilities, promote regional resiliency to hazard events, and coordinate post-disaster recovery efforts.

This continues to be a goal of Monmouth Beach's Floodplain Management Plan.

Action Item Status

The following is a summary of the actions and strategies, the targeted completion date and the current status:

Where changes to action items have been made, they are noted with ~~strikethroughs~~ for deletions and underlines for additions.



Preventative Measures

| Action Item | Priority | Status |
|---|----------|--|
| Conduct an infrastructure capacity analysis to determine the impacts of future development on the existing infrastructure as well as determine the impact to drainage patterns as a result of fill. Modify ordinances based on findings. | High | This has been completed and can be removed. |
| Adopt a Update the Floodplain Management Plan | High | This has been completed. However, this action item should remain, and be updated to reflect that the Borough is required to conduct a review of the plan annually. |
| Create an automated and expedited system for zoning and construction permit administration | High | This has been completed and can be removed. |
| Develop a Geographic Information System (GIS) Program | High | This has been completed and can be removed. |
| Prepare a Master Plan and Sustainability Element to address post-Sandy strategies and policies related to hazard mitigation, community resiliency, forecasted sea level rise and its impacts. | High | This has been completed and can be removed. |
| <u>Continue to</u> participate in FEMA's Community Rating System (CRS) Program. | High | The Borough was accepted into the program in October 1, 2017. This action item should be updated to encourage the Borough's continued participation in the program and is currently preparing documents for recertification. |
| Create a Tree-Save Ordinance. | High | This has been completed and can be removed. |
| Regularly check for blocked storm drains, outfalls, and other major drainage features; and remove sediment and debris. | High | This is ongoing and remains a priority. |
| Encourage selective acquisition of natural lands. Use the Borough's vacant land assessment (VLA) to identify areas that | Low | The Borough will continue to look for available land preservation opportunities. |



| | | |
|--|-----|---|
| may qualify for preservation. Look for additional beach access opportunities. | | |
| Investigate adopting a cumulative damage ordinance. | Low | Although there has been no action on this future project, the new Borough's Firms were adopted and became effective in June 2018. |
| Encourage and support participation in the Two River Resiliency Action Plan, the purpose of which is to develop a Coastal Resiliency Plan to address the impacts of coastal hazards and storm surge in the Navesink and Shrewsbury Rivers. | Low | This is currently underway. |

Property Protection

| Action Item | Priority | Status |
|---|----------|--|
| Require all new buildings and substantially improved buildings to be built to the ABFE elevation plus an additional three (3) feet of freeboard | High | This is ongoing. |
| Continue to participate in the National Flood Insurance Program | High | This is continuous action item. |
| Encourage the elevation of homes within the Borough to higher standards and elevations | Medium | This is ongoing. |
| Determine the actual elevation of the first floor of existing and new structures to ensure they are elevated out of the floodplain. | Medium | This is ongoing. As properties submit building permits, they are required to submit a new elevation certificate. |
| Encourage property owners to install back flow protectors. | Medium | This is ongoing. |
| Make the public aware of the various types/ methods of flood protection and floodproofing. | Low | The Floodplain Administrator does this through |



Natural Resource Protection

| Action Item | Priority | Status |
|---|----------|---|
| Conduct a lot coverage study/ impervious coverage analysis | High | This has been completed and can be removed. |
| Continue beach and dune maintenance programs. | High | This is ongoing. |
| Replenish and restore dunes and marsh islands. | Medium | The Borough was awarded a \$1.78 grant in 2014 and submitted the DEP permit application in December 2017. DEP review is currently ongoing |
| Continue to follow state regulations in regards to wetlands protections, soil erosion and sediment control, and Phase 2 stormwater. | Low | This is ongoing. |



Emergency Services

| Action Item | Priority | Status |
|---|-------------|---|
| Prepare a Debris Management Plan | High | This has been completed and can be removed. |
| Prepare a Borough Hazard Mitigation Plan | High | This has been completed and can be removed. |
| Adopt an Emergency Operations Plan Flood Annex. | High | This has been completed and can be removed. |
| Prepare a Capital Improvement Plan. | High | This has been completed and can be removed. |
| Elevate the generator located at the municipal building. | High | There has been no action on this ongoing project in 2017 |
| Continue participation in the Shrewsbury River Flood Warning System | High | This is ongoing. |
| Maintain the Borough's various hazard warning systems and social media sites. Educate the public on these systems. | High | This is ongoing. |
| Scan all documents and store securely and electronically. | High | This is ongoing. |
| Provide transportation to residents without vehicles who need to evacuate. | Medium | There has been no action on this future project. |
| Increase the flood resiliency of critical facilities within the Borough by elevating the police building, borough hall, cultural center, library, first aid, and fire house | Medium | The library and borough hall have been elevated. All other facilities have not yet been elevated. |
| Install a Borough-wide Supervisory Control and Data Acquisition (SCADA) system in conjunction with the Borough's owned and operated facilities. | Low | There has been no action on this future project. |
| Identify alternate routes to reach isolated residents | Low | There has been no action on this future project. |
| Floodproof pump station | Low | There has been no action on this future project. |
| Develop and conduct a survey to determine population characteristics | Low | Done as part of 2016 Master Plan update. |
| <u>Conduct periodic tests of the Borough emergency warning system</u> | <u>High</u> | <u>This is an ongoing monthly activity.</u> |



Structural Projects

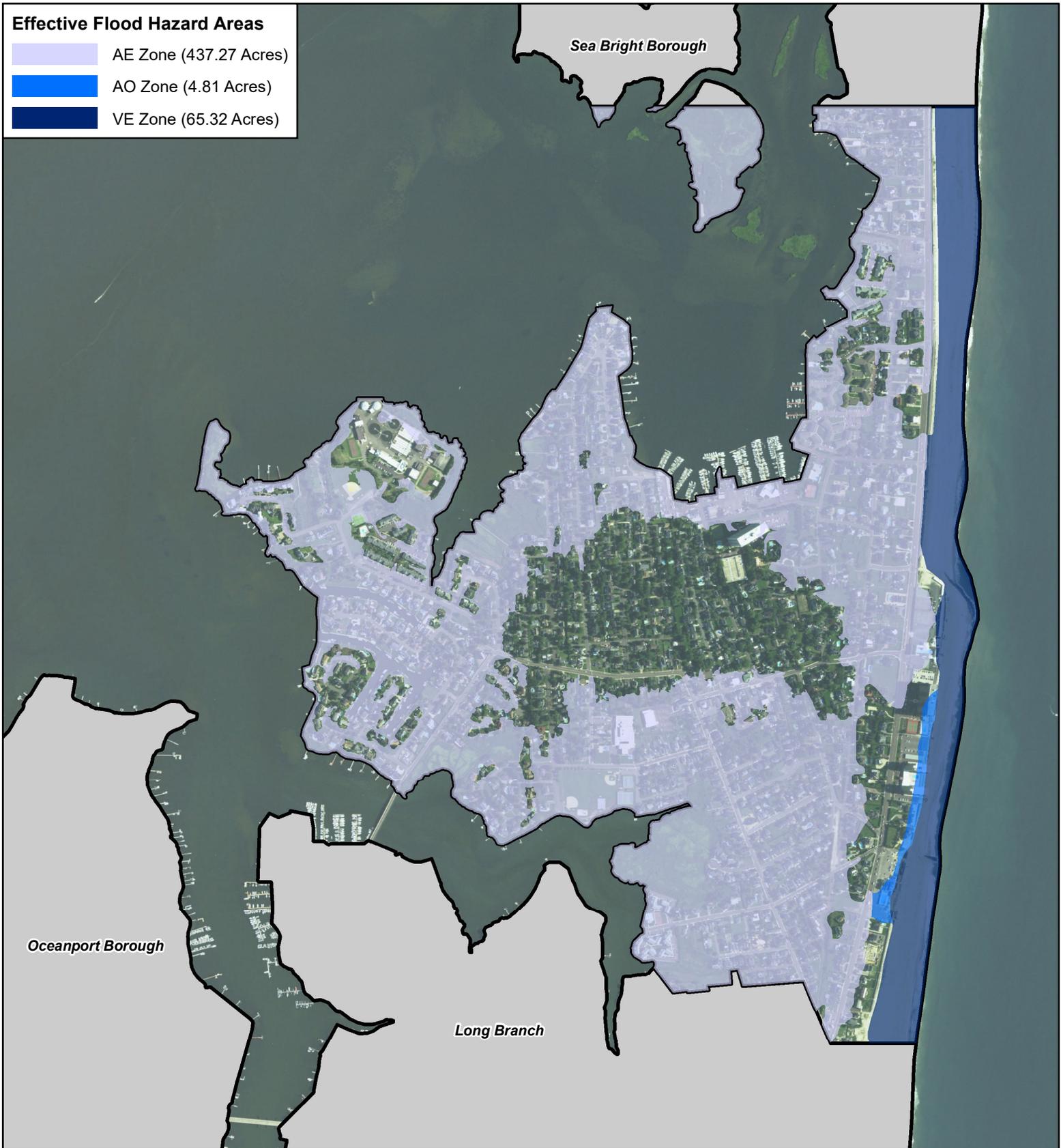
| Action Item | Priority | Status |
|---|----------|--|
| Raise, regROUT, and expand the existing seawall to fill in the gap at the southern end of town. | High | This project is currently ongoing. Construction began on September 10, 2018 and is anticipated to be complete early next year. |
| Dredge Shrewsbury River Channels. | High | In 2018 NJDOT Maritime dredged portions of the state channels. The remainder of this project is currently ongoing. |
| Install stormwater systems including inlets, manholes, and piping for low lying areas. | Medium | This is ongoing. |

Public Information

| Action Item | Priority | Status |
|--|----------|---|
| Conduct outreach projects by sending out annual mailings on flood risks, flood proofing, etc. | High | This is conducted by the floodplain administrator annually. |
| Conduct outreach programs in school to teach children the importance of natural systems. | Medium | There has been no action on this future project. |
| Keep historical flood mapping on file for review by residents. Maintain a log of all inquiries. | Low | This is ongoing. |
| Provide the Monmouth Beach Library with educational materials on flooding from FEMA. | Low | This is done on an annual basis. |
| Provide information regarding flood preparedness, NFIP, and floodproofing techniques as requested by residents. Maintain a log of all inquiries. | Low | This is ongoing. |

Effective Flood Hazard Areas

- AE Zone (437.27 Acres)
- AO Zone (4.81 Acres)
- VE Zone (65.32 Acres)



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Effective Flood Hazard Area Monmouth Beach Borough Monmouth County, New Jersey



NOTE: This map shows effective flood hazard area as of June 20, 2018.

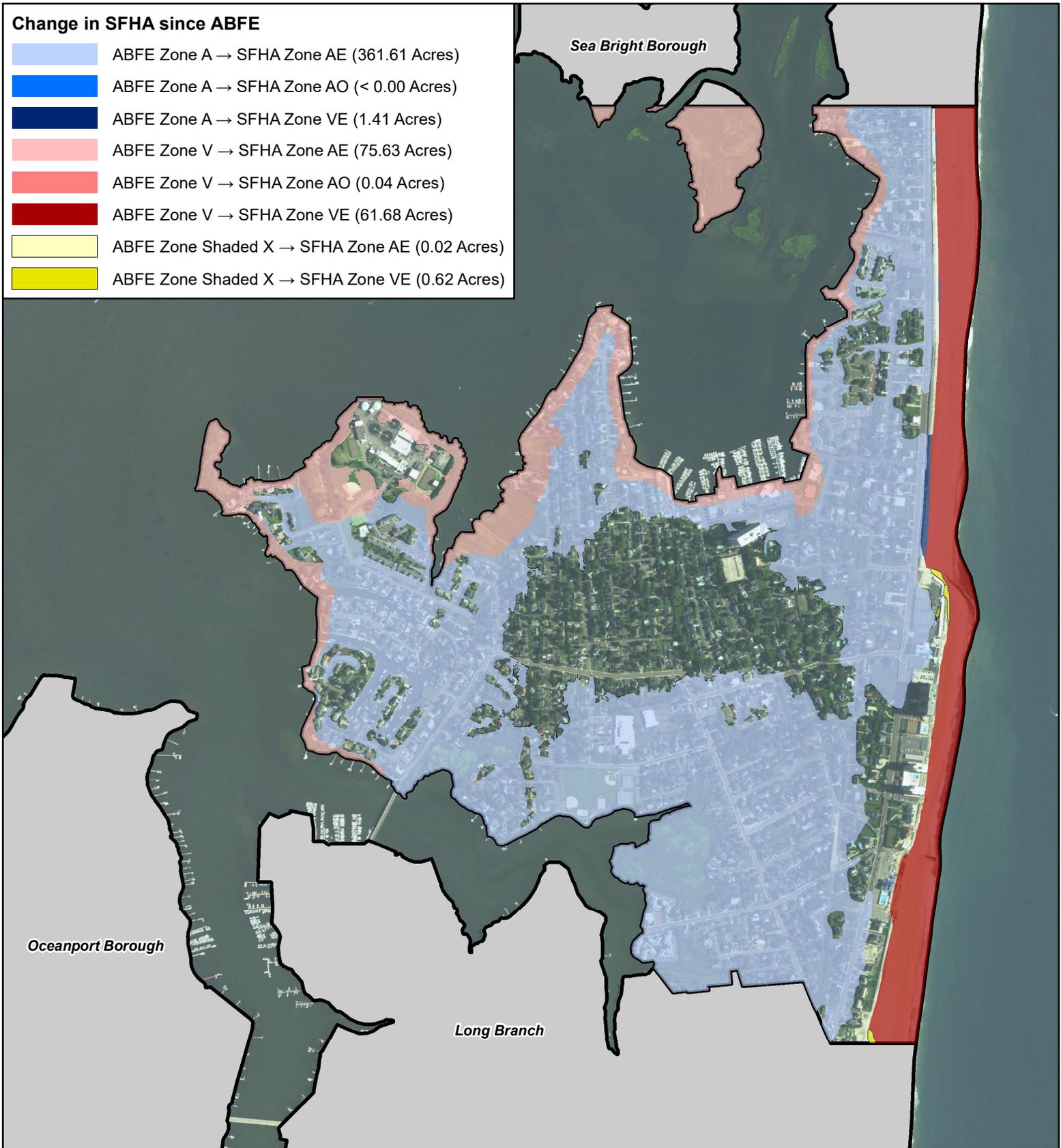
Prepared by: RED, September 19, 2018
Source: NJDEP, FEMA
File Path: H:\MBCH\G1801\GIS\Projects\SFHA_06-20-18.mxd



NOTE: This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Change in SFHA since ABFE

- ABFE Zone A → SFHA Zone AE (361.61 Acres)
- ABFE Zone A → SFHA Zone AO (< 0.00 Acres)
- ABFE Zone A → SFHA Zone VE (1.41 Acres)
- ABFE Zone V → SFHA Zone AE (75.63 Acres)
- ABFE Zone V → SFHA Zone AO (0.04 Acres)
- ABFE Zone V → SFHA Zone VE (61.68 Acres)
- ABFE Zone Shaded X → SFHA Zone AE (0.02 Acres)
- ABFE Zone Shaded X → SFHA Zone VE (0.62 Acres)



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**Effective SFHA: Changes since ABFE
 Monmouth Beach Borough
 Monmouth County, New Jersey**

0 600 1,200 2,400
 Feet

NOTE: This map shows changes between the post-Sandy Advisory Base Flood Elevations (ABFE) and the effective State Flood Hazard Area (SFHA) as of June 20, 2018.

NOTE: This map was developed using NJDEP Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

Prepared by: RED, September 19, 2018
 Source: NJDEP, FEMA
 File Path: H:\MBCH\G1801\GIS\Projects\ABFE_to_SFHA.mxd

