BOROUGH OF UNION BEACH
MONMOUTH COUNTY, NEW JERSEY

COMMUNITY RATING SYSTEM
FLOODPLAIN MANAGEMENT PLAN
2018 PROGRESS REPORT
NIFP NUMBER 340331

PREPARED BY:

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11 TINDALL ROAD
MIDDLETOWN, NJ 07748
1. **Name of the CRS Floodplain Management**

   Borough of Union Beach Floodplain Management Plan (revised Summer 2003) and Monmouth County Multi-Jurisdictional Updated Hazard Mitigation Plan (2014 Plan updated approved by FEMA April 2015)

2. **Plan Adoption History**

   The Borough of Union Beach Flood Plain Management Plan was adopted by the Mayor and Borough Council on July 18, 2002. The plan was revised to include two (2) additional repetitive loss properties and the revised plan was adopted by the Mayor and Borough Council on September 18, 2003. 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, as such, the Borough Council adopted this plan at its February 19, 2009 meeting. The Monmouth County Office of Emergency Management updated the Multi-Jurisdictional Natural Hazard Mitigation plan in 2014 and the updated plan was approved by FEMA in April of 2015.

3. **Locations Where Copies are Available for Review**

   Copies of the Borough’s Flood Plain Management Plan, dated Summer 2003, are on file in the Borough Clerk’s office, located at 650 Poole Avenue, Union Beach, New Jersey.


4. **Flooding that Occurred During 2017 and 2018 Report**

   On October 29, 2012, Superstorm Sandy caused catastrophic damage within the Borough of Union Beach. Approximately 60 homes were destroyed during the storm. Approximately, 143 homes were severely damaged and demolished to mitigate hazards to public health and safety, and approximately 140 additional homes were subsequently demolished.

   Approximately 2,043 housing units and 90 percent of the Borough was inundated with flood waters ranging from 2 to 10 feet in depth. The severe flooding impacted residents and businesses alike, leaving roadways impassable, inhibiting the circulation of emergency vehicles and eventually leading to a mandatory order of evacuation of the entire Borough.

   The entire Borough was littered with storm damage debris. Power within the Borough was out for a little over two weeks and many structures were unsafe for power to be restored. All of the municipal buildings, fire houses and EMS buildings sustained damaged and were inoperable for months after the storm. The bulkhead, boardwalk, open space areas and businesses along the bay front and throughout town were destroyed. The Borough has continued to recover from Superstorm Sandy over the last five (5) years.

   Over the past year the Borough has also experienced roadway inundation during moon tides and nor’easter storm. The regular flooding has increased because of stream siltation from Superstorm Sandy.
5. **Impacts of the Floods on the Repetitive Loss Areas**

Prior to Superstorm Sandy there were thirty-five (35) properties with repetitive loss claims, Superstorm Sandy has had a significant impact on the Borough’s Repetitive Loss Areas, as over 500 homes or roughly 22% of the Borough housing stock were substantially damaged and 90% of the Borough was inundated with flood waters ranging between 2 and 10 feet. As noted in the Monmouth County Multi-jurisdictional Natural Hazard Mitigation Plan, as of February 14, 2014 there were 77 non-mitigated repetitive loss properties and 4 Severe Repetitive Loss Properties within the Borough.

6. **List of Plan Accomplishments During the Previous Year**

See accompanying Status Report for details of the Borough’s accomplishments during the last year to both the previously adopted Borough Floodplain Management Plan and the adopted Monmouth County Multi-Jurisdictional Natural Hazard Mitigation Plan which serves as the Borough’s current Floodplain Management Plan. The attached status report also provides the status of the Borough’s recent flood mitigation actions and FEMA’s revisions to the County’s Flood Insurance Rate Maps.

7. **Objectives Not Reached and Implementation Behind Schedule**

As noted on the attached status report, the Borough continues to be on schedule with respect to the implementation of the goals and recommendations outlined in the Borough’s prior Floodplain Management Plan, as well as the Borough’s prioritized actions and implementation schedule from the updated Monmouth County Multi-Jurisdictional Natural Hazard Mitigation Plan. The Borough continues to participate in the preparation of the Monmouth County Multi-Jurisdictional Hazard Mitigation Plan which is update every 5 years.

8. **New Projects to be Started or Revisions to the Recommendations or Objectives**

At the current time, there are no revisions to the recommendations in either the prior Borough Floodplain Management Plan or the new Multi-Jurisdictional Hazard Mitigation Plan. Since both plans identify projects for future consideration and action, as such, the Borough will implement the current projects before adding new projects.

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

A status of all mitigation projects is provided in the Borough Engineer’s monthly status report, which is reviewed at the Borough Council workshop meeting held on the second Thursday of each month. The Borough will also solicit public comment on the 2018 Floodplain Management Plan Annual Progress Report at the October 11, 2018 Borough Council Workshop Meeting and the October 31, 2018 Planning Board Meeting. Both the regular and workshop meetings of the Borough Council and Union Beach Unified Planning and Zoning Board are open to the public.

10. **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 Union Beach Borough Council and the Union Beach Unified Planning and Zoning Board, and will be posted on the Borough’s website for public review and comment.

*Information Contact:* Timothy Davis, Construction Official (732) 526-8687 or Edward G. Broberg, P.E., P.P., Borough Engineer at (732) 671-6400
Introduction

On October 29, 2012, the Borough of Union Beach experienced significant flooding that resulted in property damage and beach erosion as a result of Superstorm Sandy. The wave action from this storm completely destroyed over 60 homes and 283 additional homes have been or will be demolished as a direct result of damage caused by Sandy. Approximately 2,043 housing units and 90 percent of the Borough was inundated with flood waters ranging from 2 to 10 feet in depth. The severe flooding impacted residents and businesses, leaving roadways impassable and inhibiting the circulation of emergency vehicles and eventually leading to a mandatory order of evacuation of the entire Borough.

The entire Borough was littered with storm damage debris. Power within the Borough was out for a little over two weeks and many structures were unsafe for power to be restored. All of the municipal buildings, fire houses and ems buildings sustained damaged and were inoperable for months after the storm. The bulkhead, boardwalk, open space areas and businesses along the bay front and throughout town were destroyed. Hundreds of Borough residents have been forced to vacate their homes and numerous local businesses still remain closed unable to respond to the catastrophic damages caused by Hurricane Sandy.

The Borough has continued to focus on its recovery from Superstorm Sandy. The Borough has adopted the Preliminary Flood Elevation mapping that was released in 2015 and has been rebuilding in accordance with FEMA’s guidelines.

As noted in last year’s report, Monmouth County updated its Multi-Jurisdictional Natural Hazard Mitigation Plan. This updated plan was approved by FEMA in April of 2015. The Borough adopted the new Multi-Jurisdictional Natural Hazard Mitigation Plan which replaces the prior Floodplain Management Plan. The Borough continues to participate in the update of the Monmouth County Hazard Mitigation Plan.

Status of Flood Mitigation Actions

The previously adopted Borough’s Floodplain Management Plan was adopted on September 18, 2003. This plan included four (4) goals and seven (7) recommendations. The following is a summary of each goal from this plan and the status of same:

- **Goal 1: Increase resident awareness of the impacts of tidal flooding on the Borough and measures that can be implemented to reduce the risks of flooding.** - The Borough continues to inform residents of the impacts of tidal flooding and the measures that can be implemented to reduce the risk of flooding. Again, this year, the Borough, in their Spring Newsletter, forwarded information to all property owners and business owners regarding the impacts of flooding on the Borough and measures that can be implemented to reduce those risks. This information is also posted on the Borough’s web site.

- **Goal 2: Acquire additional property along the Bayshore, along streams and flood prone areas to reduce the number of dwellings that are subject to flooding.** - Although the Borough has not acquired any property along the streams, the Borough recently acquired 634 Poole Avenue which is located within the AE Zone. The storm damaged dwelling was recently demolished, and the property will be utilized to expand the Borough Hall parking lot. The Borough will continue to look for opportunities to preserve property in flood prone areas.
Goal 3: Encourage new development and construction to implement the best management practices and soil erosion and sediment control measures. Although there has been little new development activity in the past year, storm damaged homes continue to be lifted or demolished because of Superstorm Sandy damage. The Borough and Borough Planning Board continues to require that all site plans and subdivisions, as well as capital improvement programs, comply with the NJDEP Stormwater Regulations and the Freehold Soil Conservation District standards.

Goal 4: Control development in areas subject to frequent flooding in order to avoid or mitigate the detrimental effects of development on the environment and the safety, health and general welfare of the people of Union Beach. The Borough continues to require that all new construction and substantial improvement complies with the Borough’s Flood Damage Prevention Ordinance. In August of 2009, the Borough’s Flood Damage Prevention Ordinance was amended to reflect the changes recommended by the NJDEP and the adoption of the Digital Flood Insurance Rate Maps. In 2013, the Borough’s Flood Damage Prevention Ordinance, was amended to reflect the Advisory Base Flood Elevation Maps. In 2016 the Ordinance was amended to reflect the Preliminary Maps.

Recommendation 1: Implementation of a complete flood protection system. The cost of implementing a complete flood protection system, as recommended by the Borough, continues to be not economically feasible. The Borough continues to work with the Army Corps of Engineers to pursue the implementation of a combination of structural measures. In December 1, 2008, a Value Engineering Study (VE) was conducted by the Army Corps of Engineers to review the selected Shore Protection Plan and to evaluate the State and Borough’s concerns and priorities as it relates to the Shore Protection and Flood Control Elements of the overall project. The Army Corps has completed their value engineering study and presented their findings at the December 2010 Borough Council Meeting. The Corps has received approval of the final Union Beach Flood Control Re-evaluation Report from Headquarters and Division. The design of Phase I (Beach Fill) is underway with Contract No. 1 for the beach survey completed. The Project Planning Agreement (PPA) between the State of New Jersey and the US Army Corps of Engineers has been signed by NJDEP and USACE. Phase I construction (beach fill) is expected to begin in the Spring of 2019.

Recommendation 2: Acquisition – As noted above, the Borough acquired 634 Poole Avenue this year. The home was recently demolished, and the property will be used for expanded parking for Borough Hall. The Borough will continue to look for opportunities to preserve property in flood hazard areas.

Recommendation 3: Zoning – A review of the Borough Land Use and Development Regulations is currently underway by the Borough’s Unified Planning and Zoning Board. In 2016 the Board modified the sections of the Ordinance relating to height and setback to accommodate the recent changes in the Base Flood Elevation to permit resident to elevate and rebuild.

Recommendation 4: Flood-Proofing – The Borough continues to encourage residents to implement flood-proofing methods. Information was provided to all residents as part of the spring Newsletter on the impacts of flooding and contact for additional information on flood-proofing. This information is also available on the Borough’s website. The Borough’s Construction Department has also been providing information on house raising and rebuilding to Borough Residents.

Recommendation 5: Infrastructure Improvements – As part of the Borough’s annual Capital Improvement Program, the Borough continues to upgrade and extend additional drainage systems and continues to raise local roadways above Elevation 6 (mean sea level). The Borough has
recently completed reconstructing portions of Newark Avenue, Arlington Avenue, Bank Street, Ash Street and State Street.

- **Recommendation 6: Emergency/Flood Warning Notifications** – The Borough’s Office of Emergency Management continues to operate an Emergency Advanced Warning System. Residents are notified of this system and the frequency of the Borough’s OEM radio station as part of the Borough’s quarterly newsletters.

- **Recommendation 7: Erosion and Sediment Control** – The Borough continues to implement this recommendation in that they require all construction projects implement soil erosion and control measures in accordance with the Freehold Soil Conservation District Requirements.

The draft Monmouth County Multi-Jurisdictional Natural Hazard Mitigation Plan includes thirteen (13) action items for the Borough of Union Beach. The following is a summary of the actions, priority and the current status:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Mitigation Action</th>
<th>Priority</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implementation of the Army Corps of Engineers Shore Protection and Flood Control Project.</td>
<td>High</td>
<td>As noted above, in December 2008, a Value Engineering Study was conducted to review the selected Shore Protection Plan and to evaluate the State and Borough’s concerns and priorities as it relates to the Shore Protection and Flood Control Elements of the project. The Study is complete and the Army Corps presented the study results at the December 2010 Borough Council Meeting. The Project Planning Agreement (PPA) has been signed and Phase 1 construction is expected to begin in the Spring of 2019.</td>
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<tr>
<td>2</td>
<td>Elevation of approximately 1,929 homes to the new FEMA FIRM Map Base Flood Elevation.</td>
<td>High</td>
<td>This action item is ongoing. Twenty-four homes were elevated by property owners in the last year.</td>
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<td>3</td>
<td>Raise the roadway elevation of the flood prone intersection of Spruce Street, Center Streets, Fifth Street and Pine Street and Third Street.</td>
<td>High</td>
<td>This action item was completed in 2014.</td>
</tr>
<tr>
<td>4</td>
<td>Raising the elevation of the roadway to decrease the occurrence and severity of flooding in the area</td>
<td>High</td>
<td>This is an ongoing project that is completed as part of the annual capital improvement program. This year, the Borough improved portions of Newark Avenue, Arlington Avenue, Bank Street, Ash Street and State Street.</td>
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<tr>
<td>5</td>
<td>Relocated the Department of Public Works to a location above the FEMA base flood elevation.</td>
<td>High</td>
<td>The Borough continues to evaluate alternative sites.</td>
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<tr>
<td>Priority</td>
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<td>Priority</td>
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<tr>
<td>6</td>
<td>Relocation of the Harris Gardens Fire Company to a site outside of the flood prone area.</td>
<td>High</td>
<td>No action was taken on this future mitigation item over the last 12 months as the Borough does not have legal authority to implement this project. The Borough has submitted a HMGP grant application for this work.</td>
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<td>7</td>
<td>Raise the roadway elevation of the flood prone section of Florence Avenue.</td>
<td>High</td>
<td>The project is under Monmouth County Jurisdiction. The Borough has requested that Monmouth County elevate this roadway segment. The County is presently preparing plans to replace Bridge No. 5 which includes elevating the approach sections of Florence Avenue.</td>
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<tr>
<td>8</td>
<td>Installation of flood warning signs in flood prone areas.</td>
<td>High</td>
<td>The warning system has been upgraded.</td>
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<td>9</td>
<td>Cleaning and maintenance of receiving waterways and creeks.</td>
<td>High</td>
<td>In the past year the Mosquito Commission continue with its annual cleaning and desnagging program and more recently creeks were cleaned near Scholer Park.</td>
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<td>10</td>
<td>Maintenance of the existing shore protection features (bulkhead and beach areas).</td>
<td>High</td>
<td>In 2013, the Borough awarded a construction contract for the installation of over 14,000 cubic yards of sand to replace sand that was lost as a result of Superstorm Sandy. The Borough annually inspected and repairs the existing Borough owned bulkhead.</td>
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<td>11</td>
<td>Construct a stone revetment wall along the Raritan Bay Waterfront beginning at Flat Creek and continuing approximately 875 linear feet east.</td>
<td>High</td>
<td>As noted above, the design of Phase I (Beach Fill) is underway with Contract No. 1 for the beach survey completed. Construction is expected to begin in the Spring of 2019.</td>
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<td>12</td>
<td>Annual cleaning and maintenance of the existing storm drains and inlets.</td>
<td>High</td>
<td>In the last 12 months, the Department of Public Works cleaned over 80 catch basins and all 28 outfalls in the Borough.</td>
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<tr>
<td>13</td>
<td>Upgrade Borough’s existing warning system.</td>
<td>High</td>
<td>The upgrade of the warning system is complete.</td>
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