

CITY OF RAHWAY

HAZARD MITIGATION PLAN

2015

ANNUAL PROGRESS REPORT

*Prepared for:*

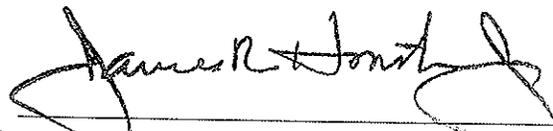
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## **1. INTRODUCTION**

The City of Rahway participates in the Community Rating System (CRS) program offered by the Federal Emergency Management Agency for communities located in the floodplain. The City's participation in the CRS program is evidence of its intent to consider the impact of future flooding and conduct the appropriate planning to prevent future losses. Participation in the program has resulted in up to a 20% reduction in flood insurance premiums for City residents. One activity completed to obtain this status was the adoption of the FEMA-approved Union County Multi-Jurisdictional Hazard Mitigation Plan (HMP) in 2012. The HMP was prepared to guide the City in identifying existing and to plan for future mitigation measures to prevent future losses of lives and property due to flooding in the City. The HMP was officially adopted by the Municipal Council of the City of Rahway on February 13, 2012.

In order to maintain CRS certification and flood insurance premium discounts, the City is required to be re-certified each year. As part of the re-certification, review and report on the progress of implementation of the HMP is required. This document is a brief report to the Mayor, the City Council, the local media, and the City residents regarding the progress made in implementing the City of Rahway's HMP over the past year.

## **2. PREPARATION & DISSEMINATION**

The City Engineer, a New Jersey licensed Professional Engineer, Land Surveyor, Planner, and Certified Floodplain Manager prepared this Progress Report by reviewing the action items outlined within the HMP and assessing the City's activities over the past year towards implementing additional action items. The implementation of the additional items Plan has been performed by the Department of Public Works and the Department of Engineering.

The HMP is available to the public at City Hall in the Engineering Department and at the City Library. The annual Progress Report will be issued to the Municipal Council, the Mayor, released to the media via the City's semi-annual Rahway Review, and made available to the public at the City Hall and Public Library.

## **3. MITIGATION PLAN ACTION ITEMS & IMPLEMENTATION**

The following are flood-related mitigation actions that have been performed, in addition to the list of Action Items within Section 9 of the HMP, and their status of implementation over the past year:

### 3.1 Preventive

- a) **Action Item:** Preventive measures are included in the City's Flood Damage Prevention Ordinance, re-adopted on November 12, 2002, Stormwater Runoff Control Ordinances, adopted in 1978 with subsequent amendments, the City's Stormwater Management Plan, Stormwater Pollution Prevention Plan, the City's Building Codes, the Open Space and Recreation Plan Element of the City's Master Plan adopted in February of 1997, last updated 2008, and the City's Zoning Ordinance adopted in December of 1997 with subsequent amendments are made part of this plan.

**Implementation:** *Implementation of this action item is the City's continued commitment to preventive activities through the administration and enforcement of various ordinances through the City Engineer and Building Department. The use and development of flood prone areas is and will continue to be limited by these ordinances.*

*In addition, the City Engineer reviews development applications to ensure compliance with the New Jersey Flood Hazard Area Control Act.*

*Periodic review of the Flood Damage Prevention and Stormwater Runoff Ordinances is conducted to ensure their consistency with the best technologies and management practices. At this time, the City is continuing the plan to update the existing ordinances in the near future an ordinance to allow the City to more definitively limit what property owners are permitted to do in terms of changing the direction or quantity of stormwater on their properties that may impact downstream or adjacent properties, which the City has identified as having a compounding effect.*

- b) **Action Item:** The Flood Damage Prevention Ordinance was re-adopted to include that the one-foot freeboard requirement shall be applied to all residential construction located within the floodplain.

**Implementation:** *Action item completed in 2009. Municipal permit applications are reviewed for compliance with this Ordinance. City professionals also conduct a periodic review of the Flood Damage Prevention Ordinance to ensure consistency with the best technologies and best management practices.*

- c) **Action Item:** Inspection and maintenance of drainage systems have been increased from twice a year to every three months, on or about March 15th, June 15<sup>th</sup>, September 15th, and December 15th.

**Implementation:** *Inspection and maintenance of the City's drainage systems are conducted by the Department of Public Works on a routine basis. Further, the City has completed the cleaning of a 4'x4' storm sewer culvert between its municipal boundaries with Linden and the outfall at Allen Street. As a result of years of debris accumulation, the neighborhoods had experienced localized, repetitive flooding, which has been reduced once with the completion of the culvert clearing and therefore improved the flood carrying capacity of the drainage facility.*

d) **Action Item:** Work with adjacent municipalities to reduce flooding within the watershed:

**Implementation:** *The City is an active participant in the Mayor's Council on Watershed Flood Control Project, which was formed after Hurricane Irene's devastation. The Council works to prevent future flooding, such as entering into an inter-local services agreement with Linden to complete the aforementioned culvert cleaning. The City also has an agreement with Union County for assistance with de-snagging stream quarters at County Bridges. Additionally, the mayor continues to participate in congressional funding meetings recently regarding the Army Core of Engineers efforts to update the flood mitigation plan along the Robinson's Branch of the Rahway River between Irving Street and St Georges Avenue.*

### 3.2 Property Protection

a) **Action Item:** Maintenance and Mitigation of Flood Control Project

**Implementation:** *The City will continue its on-going maintenance of the Flood Control Project which includes:*

1. *Re-leveling the levee – complete*
2. *Replacement of sluice gates along the levee*
3. *Vegetation control – continues annually*
4. *Elevation of generators and float controls at storm stations – complete*
5. *Service and/or replacement of sluice gates at storm stations – complete*
6. *Flood control panels are stored in one vehicle to efficiently install the flood panels as needed – complete*
7. *Elevate pumps controls at the stormwater pump stations.*

b) **Action Item:** Mitigation of Municipal Buildings

**Implementation:** *The City has completed construction in 2014 to perform the following mitigation projects:*

1. *City Hall and Rahway Police Department – replace existing generator and elevate same above flood level; provide mobile connector for emergency*

- generator hook-up; install sewer check valve to eliminate basement flooding – complete*
- 2. *Dock Street Sanitary Sewer – replace existing generator and elevate same above flood level; raise electrical controls above flood level – complete*
- 3. *Maple Ave Firehouse – replace existing generator – complete*
- 4. *Main Street Firehouse – provide mobile connector for emergency hook-up – complete*
- 5. *Recreation Center – replace gymnasium hardwood floor with vinyl floor, which is more flood-resistant – complete*
- 6. *Acquire traffic signal and trailer-mounted emergency generators – complete*

c) **Action Item:** Acquisition and/or elevation of properties in floodplain areas

**Implementation:** NJDEP is finalizing the agreement with the City to acquire properties through the Green Acres/Blue Acres programs to convert to open space. The City has already acquired two properties on West Grand Avenue through CDBG and Green Acres grants to convert to open space, one of which was demolished earlier this year and another one of which is currently being demolished. Elevation grants have been received from the RREM program for properties that were substantially damaged during Hurricane Sandy.

d) **Action Item:** Clearing of debris from drainage swale behind properties on Kline Place and Madison Hill Road. The swales current condition has affected its functionality and causes the properties to hold water for an extended period of time.

**Implementation:** The City Engineer, in response to complaints by residents since 2012, met with the each potentially affected resident to discuss the issue and review the City's plan to clear the swale behind each of their properties, to help relieve the stormwater flooding in each backyard. In concert with the City's Department of Public Works, the rear yard swale and outlets have been cleared to drain as best as possible. Further, the City Council has appropriated funding to remedy the rear yard flooding by installing new storm drain outlets. This project will occur in two phases, with Phase I to be completed this year. Phase I includes disconnecting the existing stormwater collection manhole for the Kline Place properties from the tie-in to the sanitary sewer system, and reconnecting it to the existing stormwater system via approximately 450 feet of pipe and four new stormwater drainage structures.

### 3.3 Emergency Services

- a) **Action Item:** Emergency service activities for the City of Rahway are included in the Emergency Operations Plan approved as of May 23, 1996 by the State of New Jersey Office of Emergency Management. The Plan is administered by the City's OEM and is

the responsibility of the City's OEM and the owners/operators of major or critical facilities including Merck & Co., Rahway Hospital and the Public Housing Authority. These activities include coordination amongst all emergency service personnel such as the Police Department, Fire Department, First Aid Squad, County and State OEM, Rahway Hospital, Public Works and other agencies that would be called upon during a flood emergency. The readiness of these agencies in an emergency is reviewed by the City's OEM.

***Implementation:*** *The City continues to conduct yearly Emergency Flood Control Drills to test the response and functioning of the Emergency Operations Plan for the City's flood control levee project during significant flood events. The drill is a valuable tool to identify any potential aspects of the Emergency Operations Plan that are need of modification. Since the drills have been conducted on a yearly basis and adjustments have been made, the response time has dropped from 4-hours to only 1-hour, including setup of the entire flood gate system. In addition, the City has upgraded their emergency response vehicles.*

### 3.4 Structural Projects

- a) **Action Item:** The rehabilitation of the Central Avenue bridge, the replacement of the Maple Avenue bridge, the replacement of the Milton Avenue and Lawrence Street bridges, and the proposed replacement of the Jefferson, E. Inman Avenue and Monroe Street bridges will allow for continued access to the areas served by these bridges in times of flooding, thereby eliminating or minimizing a public safety hazard.

***Implementation:*** *The County has previously completed these activities. Currently, the County is planning to reconstruct the East Hazelwood Avenue Bridge to elevate it further above the flood stage. Furthermore, preliminary planning has begun to replace the culvert at East Hazelwood Avenue, under Route 1 & 9 in 2016.*

### 3.5 Public Information Activities

The City's CRS program includes public information activities. These activities include assistance in obtaining Elevation Certificates, map information, outreach projects, maintaining flood protection information at the Public Library, availability of flood information on the City's website, and hazard disclosure and flood protection assistance provided by the City Engineer and Building Inspector. The City's Stormwater Pollution Prevention Plan also includes public information activities, in accordance with the City's NJPDES Permit requirements.

- a) **Action Item:** Substantial public information and public outreach is required as part of the CRS Program and, in addition, more public outreach has been done since it will result in additional protection of people and property from flooding hazards. Outreach has been

accomplished by sharing of existing information on flood hazards in the City through new mediums including the City's Cable Station and Website.

**Implementation:** *The City has continued its public information services and outreach programs. Specifically, yearly notice letters have been sent to owners of property within the floodplain and those recorded as "repetitive loss" properties. The notification letters discuss flood protection, insurance, and the assistance services available to them. In conjunction with the community outreach program, the City published a comprehensive article in the locally circulated "Rahway Review" in the Fall 2015 issue regarding subjects such as stormwater runoff, flood risks, flood insurance, flood safety, and the flood warning system. Relevant FEMA maps and flood information is continually made available to City residents on the City's website, in the City's Public Library, and at City Hall. Additionally, as a courtesy to City residents, the City Engineer's Office responds to all telephone and written correspondence with regard to questions about the location of flood areas and flood protection measures.*

- b) **Action Item:** Revisions of the regulatory maps should be done to identify the true hazards of flooding in the City of Rahway. As a result of the structural flood control projects undertaken by the Army Corps of Engineers and acquisition of flood prone properties by the City and County of Union, areas presently shown on the FIRM and other flood maps may not accurately reflect those subject to flood hazards today. The FIRM was revised and readopted September 20, 2006 for all of Union County, New Jersey.

**Implementation:** *Currently, the City has been notified by FEMA that they will be completing the revision process for the FIRM and is scheduled to be release in early 2016.*