# City of North Wildwood Floodplain Management Plan 2017-18 Annual Progress Report

The City of North Wildwood adopted the original Flood Plain Management Plan in April 1999 and updated in November 2008. In December 2012, the City adopted the "Cape May County All-Hazards Mitigation Plan," and later adopted a revised plan in 2015. North Wildwood also adopted a new Floodplain Management Ordinance in 2017, and also adopted the new FIRM's effective October 5, 2017.

The City has determined the Plan should be reviewed and implement additional strategies to reduce flood losses and to gain additional points under the CRS Program.

In order to accomplish this, the City has established by resolution, our participation in a Multi-jurisdictional "Program for Public Information" (PPI) Committee. The Committee was formed in accordance with the criteria set forth under provisions of Activity 510 in the Community Rating System handbook.

This is a status report for 2017-18 about the implementation and on-going efforts of the recommended Action Plan. This progress report was prepared for the Committee by the City Engineer who is also the City's CRS Coordinator and Floodplain Manager.

For credit under the Community Rating System, this report must be distributed to the local media and be made available to the public. This report is being sent to the official newspaper of the City. Copies of the report are available for review at the City Clerk's office and posted on the City's web site.

The Plan reviews a variety of measures that can reduce the flooding problems and protect our residents from the effects of coastal storms and flooding.

### 1. Background

The original Flood Protection Plan was adopted in 1999 with the most recent update in 2015 through the adoption of the Cape May County Multi-Jurisdictional All-Hazards Mitigation Plan (The Plan). The City is currently participating with the County in updating this Plan. The Plan has identified coastal storms as providing the most serious threat for flooding in our community. Severe rain events may cause localized street flooding however, rarely causes property damage.

The Plan reviews a variety of measures that can reduce the problems and protect people and property when flooding occurs. Measures reviewed include bulkhead improvements, storm sewer improvements, retrofitting/flood-proofing, flood insurance, emergency response planning, building regulations and public information.

In the past few years we have experienced three (3) major storms. In August 2011, we experienced Hurricane Irene; in October 2012, we were hit by Super Storm Sandy; and in January of 2016 we were hit by Winter Storm Jonas. All three storm events required a declaration of emergency and evacuation. In all instances, there was adequate time given to provide for an orderly evacuation, and in most cases if not all, shelter was provided.

The State, County and local governments worked together to establish evacuation centers and transportation for our residents who needed it. As a result, our City had no deaths directly attributed to these storms. It can be concluded that our emergency response plan from the State to the local government worked extremely well.

## 2. Review of the Plans Mitigation Strategy

The Plan identified thirty nine (39) mitigation initiatives for the All-Hazards Mitigation. Of the thirty nine (39), there are twenty one (21) that specifically deals with flood protection. Many of these initiatives are already in place and are on-going. Others are long term and need to be addressed.

The following are the mitigation initiative identified with the 2016 - 2017 status and changes in status in 2018.

# **Initiatives**

NW1a Where appropriate support retrofitting of structures to protect the structures from future damage.

### Status

2016 – This is an on-going initiative. The Construction Office as well as the City Engineer's office provides information on flood-proofing existing buildings to our residents. In addition, each year the City mails to all properties within the City, flood protection information which includes retrofitting.

2017 – This is a continuing and long-term initiative. In addition to the mailing, the PPI Committee has held public information meeting; presentation was made on SmartVents, flood insurance and funding for Sandy damage.

2018 – Long term initiative. No updates at this time. We continue to hold public meetings with the Atlantic Cape Coastal Coalition and MJPPI in support of this initiative.

NW1b Where appropriate, support purchase or relocation of structures in particular repetitive loss properties.

Status 2016 – This initiative needs to be further studied. Since the entire City is located within the flood plain, relocation is not an option. Rather than relocation, the City should look into developing a program to aid the repetitive loss property owners to elevate their homes above the base flood level. The Mayor should appoint a Committee to review and develop a strategy for this program. This is a long-term goal.

2017 – The new MJPPI is reviewing this initiative. No change in status.

2018 – The City filed a 2016 FMA application for blue acres acquisitions and home elevation projects. We were awarded this grant, and funding is being provided to 14 properties.

NW8 Replace/upgrade bay front storm sewer outfalls.

Status 2016 – The City has instituted a program to upgrade its storm sewer system when streets are reconstructed or when street end bulkheads are replaced. This is an on-going program.

2017 – The City continues with this program. Bulkheads were replaced at 3<sup>rd</sup> Avenue and 2<sup>nd</sup> Avenue.

Storm sewer improvements were made on  $3^{rd}$  Avenue at the bay front;  $2^{nd}$  Avenue at the bay front; Pine Avenue between Anglesea Drive and Illinois Avenue;  $23^{rd}$  Avenue and  $22^{nd}$  Avenue at the bay front.

2018 – Back-bay sewer outfalls were replaced at 14<sup>th</sup>, 15<sup>th</sup>, 17<sup>th</sup>, and we are rebuilding the storm sewer system at 16<sup>th</sup> and Delaware Avenue, one of our most westerly Bayfront roads.

NW9 Elevate New Jersey Route 147 between Delaware Avenue and Anglesea Drive.

Status 2016 – This is a long term initiative.

2017 – No change in status.

2018 – No change in status; however, pump station project anticipated for 2019-2020 will alleviate flooding from our emergency evacuation route.

NW10 Elevate floors of the Anglesea Fire House and the 15<sup>th</sup> Avenue Fire House.

Status 2016 – This is a long-term initiative.

2017 - No change in status. The PPI Committee is reviewing this initiative.

2018 – We are in the midst of a real property acquisition to build a new fire house, in a less flood-prone area, in a new building that is above BFE.

NW13 Upgraded storm sewer system along Spruce Avenue from Central Avenue to Pine Avenue. This will provide an alternate route out of the City during a flood event.

Status 2016 – As a result of the Presidential Disaster Declaration for Super Storm Sandy, the City filed an application under the Hazard Mitigation Grant Program. Our application was not funded.

2017 – The City is continuing to seek funding for this mitigation project.

2018 – The City has secured over \$10 million in HUD funds for the installation of a pump station/complete overhaul of the of the storm sewer system along Olde New Jersey Ave.

NW15 Continue to provide educational materials to our residents.

Status 2016 – This is an on-going initiative. Each year the City mails to all property owners flood protection information. The Cape May County Library provides various FEMA publications detailing flood protection, flood-proofing, etc. Brochures, press releases and public information were presented.

2017 – This is an on-going initiative. In 2017, the PPI Committee continued with brochures, press releases and held public meetings presenting flood information materials. The City's website has a page dedicated to flood information, and also has information on our MJPPI.

2018 – The City in conjunction with the Atlantic Cape Coastal Coalition holds monthly meetings, flood talks, etc. on the first Thursday of every month. These meetings are open to the public and we have 2 mandatory meetings per year.

NW16&17 Continue to enforce the City's Floodplain Ordinance requiring new and substantially improved building to meet all FEMA Regulations and to require that the first floor be one (1) foot above the base flood elevation and to require substantial improvements to buildings on a cumulative basis over time.

Status 2016 – This is on-going. The Construction Office enforces all FEMA regulations on new and substantially improved structures and maintains a log of the value of property improvements so that when the cumulative value exceeds 50%, the entire structure must conform to FEMA regulations. The City passed an Ordinance that now requires 2 feet freeboard and does not allow fill to elevate a property above the base flood elevation to receive a LOMR or CLOMP based on fill.

2017 -This is an on-going initiative.

2018 – In 2017 the City of North Wildwood amended our floodplain management ordinance to include stricter regulatory standards, but also to adopt the new FIRMs that went into effect on 10/5/2017.

NW18 Continue the City's outreach efforts to inform residents and visitors about flood damage and protection.

Status 2016 – This is an on-going program. Each year we mail every property owner flood protection information, the MJPPI Committee continues to hold advertised, public meetings and provides additional handouts.

2017 – This is an on-going program. No change in status.

2018 – This is an ongoing program, and mail-outs are conducted annually.

NW19 Continue prohibition of development within our beach, dunes and Open Space areas.

Status 2016 – This is on-going. The City has Ordinances in place which prohibit development in these areas.

2017 – No change in status. This is an on-going initiative.

2018 – No change in status. The City has NFOS completed forms for all open space within the City.

NW20 Encourage the development of dunes along our beach front.

Status 2016 – This is on-going. The City completed a beach nourishment project which included the construction of dunes along our entire ocean front beach. The top of the dunes is set at elevation 14.5 NAVD 1988, which should provide protection against the projected 100 Year Storm Event.

2017 – Beach re-nourishment is an on-going process. The USACOE is currently in the process to develop an island-wide program to develop dunes along the entire island of the Wildwood's oceanfront, and to maintain the dunes over the long-term.

2018 – We annually conduct beach nourishment projects, including dune reconstruction and sand-back-pass. We annually move 100,000 – 300,000 cy of sand. We are currently in the midst of a seawall extension project, partially funded by NJDEP.

NW21 Maintain existing Zoning Regulations to prevent an increase in development densities.

Status 2016 – The City has adopted an Ordinance incorporating the recommendation in the Master Plan as adopted by the Planning Board that reduced density in some areas.

2017 - No change in status.

2018 – The Comprehensive Master Plan was revised recently and the new plan will be adopted in 2018.

NW22 Continue to maintain elevation certificates.

Status 2016 - This is an on-going effort. The Construction Office requires that all construction permits submit an elevation certificate for the property. These certificates are maintained in the Construction Office.

2017 – No change in status. The Construction Office will continue to require elevation certificates.

2018 – No change in status. The Construction Office continues to require elevation certificates for all new and substantially improved structures.

NW23 Continue to inform the public about financial assistance that may be available for repetitive loss properties.

Status 2016 – This is an on-going effort.

2017 - No change in status. This is an on-going initiative.

2018 – Ongoing effort, letters sent out to all properties within the repetitive loss area – the repetitive loss area encompasses the entire City.

NW24 Support the completion of the Beach Fill Project.

Status 2016 – The City continues to monitor our beach twice per year and just before a forecasted major storm. This information is used to document beach loss. In the event a disaster is declared, the City can document to FEMA how much beach is lost for funding purposes. In addition, the City has been proactive in continuing to provide funding to re-nourish our beach as conditions warrant.

2017 – This is a continuing effort. This year the City with a joint effort from Wildwood transferred sand from Wildwood to reinforce our northern beach.

2018 – Continuing effort and we support the Army Corps Shore Protection Project, which is scheduled to commence in 2020.

NW25 Work with property owners along the bayside to install/upgrade bulkheads.

Status 2016 – This is an on-going effort. The City has an Ordinance that requires that all bulkheads in the City be set at a minimum elevation of 8.0 NGVD 1928 to prevent flooding due to overtopping of the bulkhead. As owners replace their bulkheads, they will have to meet the new standards. This is a long term process. The City has also instituted a program to replace all street end bulkheads along the bayside of our City.

2017 – This is an on-going initiative. The City has replaced street-end bulkheads at 17<sup>th</sup>, 15<sup>th</sup>, 14<sup>th</sup>, 7<sup>th</sup>, 3<sup>rd</sup> and 2<sup>nd</sup>Avenues.

2018 – We are in the midst of going out to bid for 2 new bulkheads: 12<sup>th</sup> and 11<sup>th</sup> Avenues.

NW26 Work with the USACOE to elevate and reinforce the seawall along the Hereford Inlet.

Status 2016 – This project is complete. The top of the seawall is set at elevation 11.7 NAVD 1988 (13.0 NGVD 1928).

2017 – No change in status.

2018 – No change in status.

NW27 Work with Cape May County to upgrade the storm sewer system along New Jersey Avenue, County Route 621.

Status 2016 - The County has completed storm sewer improvements along the southern end of the road.

2017 - No change in status.

2018 – County and City to undergo street reconstruction of New Jersey Avenue from New York Avenue to 3<sup>rd</sup> Avenue.

NW31 Continue to monitor and survey the beach.

Status 2016 – This is an on-going process. The City has contracted with Stockton State College to monitor and survey our beach. This is done two (2) times per year as part of our approved Engineered Beach Plan.

2017 – This is an on-going process. We continue to monitor our beach twice a year.

2018 – Ongoing process. Surveys completed quarterly or before and after major storm events. Surveys conducted by Dr. Farrell and Stockton Coastal Research.

NW33 Elevate the Beach Patrol Building.

Status 2016 – This is a long term project. The PPI Committee is reviewing this initiative.

2017 - No change in status.

2018 – Fall of 2019, the City will undergo a project to rebuild the Beach Patrol building, above BFE and in accordance with all current floodplain management standards.

NW36 Dredge the channels to our storm sewer outfalls. As the channels naturally silt-up this reduces the flow capacity of our storm sewer system causing flooding.

Status 2016 – This is a long term project. The channels should be inspected each year and dredged as needed. The County Mosquito Department should be contacted to provide the necessary dredging.

2017 – No change in status.

2018 – No changes in status. Actively looking for available grant funds to pursue such action.

#### **SUMMARY**

The City has instituted and continues to enforce all of the recommendations in the All-Hazards Mitigation Plan.

The City has appointed by Resolution, a "Multi-Jurisdictional Program for Public Information/Floodplain Committee" (MJPPI Committee). This Committee continues to review all the initiatives within the All-Hazards Mitigation Plan. The Committee finds that all the initiatives be continued. The Committee will also review possible new initiatives.