

VILLAGE OF RIDGEWOOD

FLOODPLAIN MANAGEMENT PLAN *ANNUAL REPORT*

For

**National Flood Insurance Program
Community Rating System**

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INTRODUCTION

The Floodplain Management Plan was created in November 2008. The Plan is available on the Village's website: www.ridgewoodnj.net/find/fpm or in the offices of the Village's Engineering Division.

The Village of Ridgewood has been identified by the Federal Emergency Management Agency (FEMA) as having a repetitive flooding problem. Specifically along the Ho-Ho-Kus Brook and Saddle River. FEMA has identified eleven properties that have made multiple claims. These properties have been identified as repetitive loss properties. A repetitive loss property is a property that has two or more claims of at least \$1,000.00 against the National Flood Insurance Program (NFIP) within any given ten year period since 1978. The NFIP Repetitive Loss Update Worksheets are available for review by qualified individuals in the offices of the Engineering Division.

The purpose of this annual plan is to track the progress of the improvements made towards removing or remediate the repetitive loss structures out of there "high risk situations". The annual report will be mentioned in the annual repetitive loss outreach letter sent out to the repetitive loss areas designated by the Floodplain Management Plan.

New updates and revisions to this plan for 2015 are shown in italicized typeface.

EVALUATION OF THE ACTION PLAN

➤ Preventive Activities

- Construction Code enforcement is by the Village's Building Department. The building Department uses the International Building Code (New Jersey Edition) 2006. All projects within the floodplain are additionally reviewed by the Engineering Division.
- In 2009, two new ordinances were introduced for dumpsters and fertilizer application to protect stormwater runoff. Ordinance No. 3206 for Dumpsters and Ordinance No. 3200 for Fertilizer. The intent of both ordinances is to reduce contaminants from entering stormwater runoff and subsequently during floods from being introduced into flooded homes. These ordinances were required by the New Jersey Department of Environmental Protection (NJDEP).
- The following additional ordinances were also adopted in 2009: Ordinance No. 3223, requiring the retrofit of all catchbasins on private properties when parking lots are resurfaced with flow restrictive grates (to prevent the introduction of solids and floatables into stormwater runoff into the MS4); Ordinance No. 3225, protecting steep slopes and creating riparian buffers along all of the Village's water courses. The riparian buffer ordinance creates and helps maintain the floodway from encroachments

from adjoining property owners. Both ordinances were modeled after the NJDEP format.

- All Building Department and Engineering Division Inspectors have been trained to notify the Community Rating System Coordinator of any soil erosion or sediment control issues during their daily site inspections about the Village.
- The Community Rating System Coordinator is also enforcing the Village's landscaper ordinance. Landscapers are regulated on when they can put leaves along the gutter line, coordinating with the Department of Public Works leaf pick-up program schedule. The Village is divided into four zones, with scheduled pickup dates. This helps reduce the chances of leaf piles clogging stormwater inlets.
- Currently there are *two* new dwellings *being constructed* in the Village's floodplain that were referred to the New Jersey Department of Environmental Protection (NJDEP) for approval. Several of these dwellings have been in development for over ten years without any success due to the stringent regulations. With the upturn in the economy, such types of developments, requiring extensive permitting from NJDEP, are now viable again. One dwelling is having a private bridge constructed, permitted with the NJDEP, to access the home being built. Said home will have flood vents and have no occupied area below the base flood elevation.
- The Department of Public Works continues to implement the CRS 540 program by maintaining streams and ditches. Inlets are inspected and cleaned as frequently as staffing levels permit.
- The County of Bergen has installed Phase II restrictive flow grates on their inlets on County roads, reducing the flow of the runoff into drainage systems. This County program has increased localized flooding on streets, creating additional emergency calls and road closures. The Engineering Division is on an ongoing quest to inventory these situations and permission has been granted by the county to remove the plates on a case by case basis, with the approval of the Village Engineer.

➤ **Property Protection Activities**

- Yearly outreach letters are sent out to all properties in the floodplain and an additional letter to all repetitive loss areas. These letters reference websites and FEMA publications that are available in the Engineering Division's office.
- The Village's Municipal building is one of the repetitive loss structures. A flood wall protection system was completed in the spring of 2009. The project consisted of building a poured reinforced concrete wall five feet out and around the perimeter of the low lying section of the building. At door ways, a product called "Door Dam" would be installed to hold back water instead of the concrete wall. This wall system protects the Village Hall up to a 25 year storm event. The project was well documented in the local newspapers and many residents are interested in the product on a

smaller scale for residential properties which can potentially reduce flood damage claims. On August 27 - 28, 2011 Hurricane Irene hit New Jersey with an approximate 35 year storm event at Village Hall. The Door Dam wall system held back the majority of the storm with the help of (6) 2" sump pumps and (2) 3" pumps, until the peak of the storm when the Door Dam was over topped by approximately 2 inches over an eight foot section of the lowest point of the doors by the Village Hall front doors. At that point there was nothing left for the Village Employees to do than to abandon the first floor. Subsequently, the first floor walls had to be gutted four feet high. All sheet rocked walls were replaced with solid block walls and electrical outlets were raised about the flood hazard elevation. Essentially, the Village Hall first floor is now able to flood with minimal damage to the structure up to a 100 plus 1 foot year storm event.

➤ **Natural Resource Protection Activities**

- Continue the protection of parkland inside and out of the floodplain. Parkland within floodplain is maintained where possible to reduce the chance of floatables being carried downstream and snagging on bridge structures. Often residents are not prepared when rivers rise quickly and unexpectedly due to restricted areas in the stream's corridor. This is also part of our CRS 540 program. Staff conducts inspections pre and post severe storms to ensure there are no debris dams. Periodically, the New Jersey Department of Environmental Protection (NJDEP) Green Acres Program inspects all of the sites. Where encroachments are found by adjacent property owners, the property owners are notified to remove the encroachments.
- October 2010, the Village working with Boy Scout Eagle Scout Candidate Aidan Angus had completed Stream Bank Sandbar Deforestation Project for the Ho-Ho-Kus Brook. The project included removing saplings (typically, 4" diameter or less), that are growing on sandbars and removed snagged floatables (logs, branches) in the same areas. The goal of the project was to improve the stream flow hydraulics. The efforts of this project were seen during Hurricane Irene when flood flows during the storm showed less backwater effects in the area of the cleanup.
- The Village purchased a horse farm in 2004. This property is approximately 20% in the flood plain, including a pond with a breached dam. The Village purchased this property to stop a potential thirteen property sub-division. 33% of the entire property is protected as passive area and the remaining area will be utilized a public parkland. The dam has been rebuilt and now controls excessive flow out of the pond and reduces the flow into the Ho-Ho-Kus Brook. The flow over the dam was observed at the peak of Hurricane Irene, with the spillway functioning perfectly.
- The Village purchased in 2010 a wooded eight acre property which is zoned for commercial use and 500 feet from a sensitive floodplain area. Instead of attempting to rezone the property, the Village is purchasing the

property with support from Green Acres Grants from the County. This property was added to the Parkland inventory and protected from future commercial development.

- Continue enforcement of the Storm Water Management Plan which is noted in the Preventive Activity.
- The Village continues on a yearly basis, to improve its infrastructure by installing several thousand feet of curb to reduce soil erosion at road edges. Where necessary, extensions to the storm drainage systems are made when a street is scheduled for resurfacing.
- The Village continues to enforce the installation of seepage tanks for new developments that create more than 200 square feet of impervious cover. These seepage tanks reduce rain runoff to the streets (and the stormwater collection system) and in turn reduce the burden on the streams.
- The Village has requested in our Capital Budget process to purchase an environmentally sensitive eleven acre property along the Saddle River which was abandoned by an unauthorized farmer. The majority of the property is in the floodway and not desirable to develop. Preliminary plans are being developed to propose lowering the land elevations to increase flood storage volume for a 10-year storm. This project would greatly reduce flooding downstream. This land was purchased by a developer that is willing to preserve the flood plain area and only redevelop the land above the Flood Hazard Area. Developer will be required to address stormwater control and filtration devices as regulated by Village ordinances. *We are hoping this project will go to construction in 2015.*
- The Village's Engineering staff is now working with the Village's Open Space Committee on acquiring lands in the repetitive loss areas and other non-desirable properties that seems to be neglected. This has been a slow process.
- After Hurricane Irene, FEMA has shown interest in purchasing Repetitive Loss properties and knocking down the structures to give way to the flood waters. NJDEP uses the slogan "Blue Acres". The residents MUST submit voluntarily to this program. The Engineering staff has compiled data from the Fire Department, resident's photos and flood gage data to determine zones for "Blue Acres". Since this program is voluntary, it has not been a popular alternative to reduce flood insurance claims.
- On a yearly basis, The Women Gardeners of Ridgewood in partnership with Ridgewood Wildscape Association, clean various stream banks and wooded public park lands reducing floatables and blockages in the flood way. The Village Council has actively supported these projects.
- Additionally, The Ridgewood Wildscape Association partnered with several religious organizations and the Ridgewood Environmental Advisory Committee to do a cleaning along the Ho-ho-kus Brook for 2014. For 2015, a steam corridor cleaning program is plan for October 4, 2015 for the Goffle Brook area. *This will be the ninth year Ridgewood*

Wildscape has completed such a generous and physically challenging achievement.

➤ **Emergency Services Activities**

- Continue the CRS 540 program.
- *A replacement Jet-Vac sewer jetting vehicle has been ordered by the Village. It is anticipated to be in service in early 2016. The current vehicle is over used and has a limited life span left. The present vehicle is often called on during storms and has become unreliable*
- Continue to coordinate services between Ridgewood Office of Emergency (OEM) and Bergen County OEM. The County has approved the Village OEM's Hazard Mitigation Plan which heightens emergency planning and standard operating procedures for dealing with flood events.
- An After Action Review was conducted after Hurricane Irene and Hurricane Sandy with all department supervisors including OEM, Valley Hospital and Board of Education. Procedures, communications and planning were some of the topics reviewed. The Engineering division was an integral part of the process.
- *The Village received a FEMA Hazard Mitigation Grant Program award for emergency power generation capability for four key facilities (Village Hall, two potable water well houses, and a sewer pump station). The work will be done in 2016.*

➤ **Structural Projects Activity**

- Habernickel Family Park, (noted above as the horse farm). The 2011 Improvements included rebuilding a low hazard dam and pond dredging. These improvements increased the volume and habitat to the pond and the new dam will control intense rain events and reduce the peak flow downstream in the Ho-Ho-Kus Brook.
- Various design/studies are proposed yearly for a low lying localized street flooding situations. These areas might not be a repetitive loss area, but the potential of risk are very high.
- The Warren/Marshall Street repetitive loss area is the only area that is not directly on the stream banks and is a low lying area affected by a high stream elevation and backflow through the drainage system. A design/study project is under way on installing a "Tideflex" gate on the drainage system's discharge line to reduce backwater effects when the brook is high. This same system was installed at the Village Hall Complex to increase the freeboard height of the complex by two to three feet. This drainage area is also next to a recreational field that has been reconstructed with a synthetic turf. As part of the permit process, the field's finished elevation was lowered to create an additional flood storage volume. The additional flood storage created is approximately 330,000 gallons (to the Flood Hazard Elevation). *The Village also extended the*

stormwater collection system in Marshall Street this year to improve removal of water from the area.

- In 2012, the Village undertook a major de-silting/de-snagging project along the two major water courses in the Village (the Saddle River and the Ho-ho-kus Brook). Funding was from the National Resource Conservation Service. The majority of the work was done just before Hurricane Sandy impacted the area. *For 2015, the Village received a grant from the New Jersey Department of Environmental Protection for desilting and desnagging our water courses. This work will be bid out Fall 2015 and concentrate on the Ho-ho-kus Brook area.*

➤ **Public Information Activities**

- Continue the yearly mailer (the community outreach letter) to every property in the floodplain, *with applicable updates.*
- Continue the yearly mailer to the repetitive loss areas, *with applicable updates.*
- Continue the yearly mailer to all local realtors, banks and insurance companies detailing the Villages extensive program.
- Continue updating the Village's website: www.ridgewoodnj.net/find/fpm
- Continue to update documents at the public library.
- Continue to provide information to residents making inquiries and documenting them via CRS-320 and CRS-360.
- The Village received the new preliminary Flood Insurance Rate Map from the NFIP. The maps are dated August 29, 2014. Residents asking questions will be shown the preliminary maps. *For 2015, residents have been eagerly awaiting the new final maps. The Engineering Division will endeavor to provide information to all residents making inquiries.*

SUMMARY AND CONCLUSIONS

This 2015 Floodplain Management Plan Annual Report continues to support all the tasks in the Community Rating System. Progress is continually being made. Most improvements are done by the Village rather than the residents strictly due to the familiarity of the Engineering Division's knowledge of the drainage system and acquiring resources of funds and grants by other government agencies. Capital budgets have recently been severely limited to minimal improvements in the foreseeable future. The Engineering staff constantly trying to raise the public's awareness about flooding and its affects.

The Village also actively encourages and assists community groups with stream corridor cleaning and beautification projects. These projects raise awareness of stream corridors in the community and the key roles they play in properly functioning drainage systems.

The Village of Ridgewood continues as a Class 7 community, allowing for a fifteen percent premium discount on all National Flood Insurance Program (NFIP) policies.