

CITY OF DES PLAINES Community Rating System (CRS) Activity 510

2014 Floodplain Management Plan Annual Report

I. Background

As part of the City's participation in the Community Rating System (CRS) program administered by the National Flood Insurance Program (NFIP), the City of Des Plaines adopted by Council Resolution R-201-13, a Hazard Mitigation Plan on December 16, 2013. In so doing, the City of Des Plaines receives the following direct benefits:

• CRS credit under Activity 510 Floodplain Management Plan.

In order to retain CRS credit for Activity 510, the City must prepare an annual progress report on the various activities the City of Des Plaines is performing as referenced in the Hazard Mitigation Plan (HMP). This annual progress report is for the period October 1, 2014 through September 30, 2015.

CRS credit for these activities, as well as increased efforts during a recent Community Assistance Visit (CAV) may result in a class change from a class 7 to a class 6 which would then give our residents a 20% discount on their flood insurance premiums.

II. Annual Report Preparation, Distribution and Availability

This annual report is prepared by the City of Des Plaines Public Works and Engineering Department. The annual report is available to the public on the City's website. The reader may obtain a copy of the annual report by electronic file download off the City of Des Plaines web site, located here:

http://www.desplaines.org/index.aspx?NID=697

III. Action Items

Action Item 1. Plan Adoption: Adopt this 2013 *City of Des Plaines Hazard Mitigation Plan* by resolution of the City Council. A draft adoption resolution is included in Section 10.4 of this Chapter. As in 2007, the resolution calls for the continuation of the Mitigation Planning Committee.

Annual Report 1 October 2014

Benefits: Formal adoption of the revised plan ensures that City staff are authorized and instructed to implement the action items. Adoption is also a requirement for recognition of the plan by FEMA mitigation funding programs and the Community Rating System.

Status: Complete- Adopted on December 16, 2013.

Action Item 2. Plan Implementation and Maintenance: To implement and maintain this *Plan*, the Mitigation Planning Committee will:

- Act as a forum for hazard mitigation issues,
- Disseminate hazard mitigation ideas and activities to all participants,
- Continue to collect public input,
- Monitor implementation of this Action Plan,
- Report on progress and recommended changes each year to the City Council, and
- Draft the five-year update mandated for continued FEMA recognition of the *Plan*.
- Continue to apply for Federal Grants for buyouts of repetitive loss properties.

Benefits: Those responsible for implementing the various recommendations have many other jobs to do. A monitoring system helps ensure that they don't forget their assignments or fall behind in working on them. The *Plan* will be evaluated in light of progress, changed conditions, and new opportunities.

Status: Ongoing- We have formed a CRS committee with several staff members and residents. We will be meeting this upcoming winter to work on implementation and maintenance of the plan.

Action Item 3. Public Information Efforts: The City will develop public information messages that address the following topics:

- Personal safety and emergency response actions, including warning procedures, safety in mobile homes, and health precautions
- Property protection measures, including insurance, that address flooding, sewer backup, severe storms and wind events
- Government programs, including permit requirements, the City's rebate program, ongoing flood and drainage improvements, drainage maintenance, and dumping regulations
- Other appropriate topics that are credited by the Community Rating System

The City will review the following public information topics and projects. They will be revised as appropriate to cover all of the hazards facing the City and to include the latest language credited by the CRS.

- Articles in the Des Plaines Digest
- Information on the City's website
- Flood hazard information from the Flood Insurance Rate Map and other sources

- Staff advice and consultations with inquirers
- Hazard and mitigation references in the public library
- The City's multi-hazard Public Emergency Preparedness Guide
- The City participated in a meeting in May 2013 in regards to an update request from a local State Representative from the April 2013 floods and the aforementioned HMGP buyout.
- The City of Des Plaines participates on the Upper Des Plaines River/Tributaries Advisory Committee by the Northwest Municipal Conference NWMC

Benefits: There are many benefits to having a well-informed public. For example, deaths from lightning have steadily decreased over the years because people are more aware of what they should and should not do. More self-help and self-protection measures will be implemented if people know about them and are motivated to pursue them.

Status: **Ongoing-** The following ideas will be reviewed by the City's Public Information Officer. She will report to the Mitigation Planning Committee on the costs and benefits of implementing them.

- A short checklist for residents to review how prepared their families are and where they can go for more information on subjects where they are not prepared
- Projects with the school districts
- A PowerPoint presentation for interested civic or neighborhood organizations
- Displays on the hazards and protection measures that can be used at the Library, organizational meetings, Taste of Des Plaines, August

Fest, block parties, etc.

- Signs in flood prone neighborhoods that show how high past floods have gone and relate river gage readings to the area
- Putting flyers, such as the Red Cross' family disaster plan brochure (illustrated to the right), in public places and the City's welcome packet for new residents
- A hazard mitigation e-mail subscription list
- Short illustrated messages relevant to the season for e-mail and cable TV notices

Some of these media, such as e-mail notices, presentations, and short handouts, can readily be tailored to the audience and translated into other languages.



We continue to publish articles in the Des Plaines Digest which is mailed out quarterly on the flood hazard. We also give out flood plain determinations daily, and attend both the upper and lower Des Plaines River Watershed Planning Council meetings.

Action Item 4. Continued Participation in the Community Rating System: The City is currently a CRS Class 7. This status should be maintained through continued implementation of the credited activities, including some that are also Action Items in this *Plan*. The City through discussions with FEMA has enough points for a Class 6 and will be promoted to this class, if they can show that they did property damage assessments for all flood damaged property during the April 2013 flood event. The City hired outside consultants to assist in the damage assessment and used the SDE software to determine substantial damage.

Benefits: There are many benefits to CRS participation, as explained in Section 1.5. In addition to saving residents money, the CRS has been shown to provide an effective incentive to implement and maintain floodplain management activities, even during times of drought.

Status: Ongoing- The City is preparing a response to a CAV visit this past July. We are hoping to move up to a Class 6 after this CAV response is complete.

Action Item 5. Continued Implementation of NFIP Requirements. When they are up for revision, the City's comprehensive plan and the zoning, subdivision, floodplain, and stormwater management ordinances will be revised to incorporate mitigation provisions, especially:

- Protection of new development from natural hazards
- Zoning of appropriate vacant floodprone areas and use of tools such as PUD, dedication, or acquisition, to preserve them as open space
- Mandating storm shelters in new mobile home parks
- Requiring all building sites in new developments to be above flood levels
- Requirements to bury utility lines has been adopted in section 13-2-5. W of the City Code.
- Prohibiting new critical facilities from the floodplain
- Prohibiting enclosures under elevated buildings to deter later modifications of the floodable areas
- Setting a lowest floor and lowest opening height standard on all new buildings built outside the floodplain. The City now has this standard. The top of foundation is to be 18" higher than the centerline of the street.
- Incorporation of best management practices in drainage and stormwater management facilities
- Continue to apply for Federal Grants. The \$30,000 Increased Cost of Compliance (ICC) money is not enough to raise any structures in Des Plaines
- The City is filling out a pre-application for additional funding for buyouts based on the Federal Declaration of the April 2013 floods.

Establishing a permanent mitigation planning committee

The mitigation necessary to prevent the evacuations and minimize the damage that flooding causes would be for the City of Des Plaines to be granted the \$10.9 million dollars that they applied for in 2009 with the HMGP for buyout of 31 repetitive loss homes along with an additional \$55 million to buy out another 220 homes that experienced severe damage. Elevating these homes is not an option since they would lose their basements which would lower their market value considerably. Also, rescuing residents in these elevated homes would still be a hazard for our fire and police departments to access these homes.

Benefits: By incorporating mitigation provisions into other plans and regulations, more offices will be implementing mitigation activities, hazardous areas will be avoided, and new developments will be better protected.

Status: **Ongoing-** The City of Des Plaines is complying with the MWRD Watershed Management Ordinance (WMO), which has an effective date of May 1, 2014, in addition to Title 14 of the Des Plaines City Code.

Action Item 6: Seek Mitigation Grant Funding Cost Beneficial Projects

The City should continue to apply for mitigation grant funding through available IEMA and FEMA programs for mitigation planning and mitigation projects that address the priority hazards presented in this *Plan*. As required by IEMA and FEMA programs, projects must be cost beneficial. Projects can include property protection for flood, wind, severe storm and earthquake hazards.

Benefits: The City, along with residents and property owners, would benefit from the available grant funding.

Status: Ongoing- The City Continues to pursue mitigation funding for the 2013 flood disaster from multiple sources. The City has received mitigation grant funding for the purchase and demolition of homes in the Big Bend Area from the 2008 flood disaster. We are also waiting for additional funding from the flood of 2013 for which we had previously submitted a grant application.

Action Item 7. Continued Participation in StormReady: The National Weather Service established the StormReady program to help local governments improve the timeliness and effectiveness of hazardous weather related warnings for the public. Des Plaines has been designated as a StormReady community. To continue to qualify, the City must meet certain criteria for severe weather warning of problems and public information. The City will review the requirements for becoming a StormReady community in detail.

Benefits: As with the Community Rating System, StormReady can be used as a yardstick to ensure the City's programs meet national standards. By meeting the StormReady standards the City will be better able to detect impending weather hazards and

disseminate warnings as quickly as possible. It is difficult to measure the resulting benefits of saving lives and preventing injuries and property damage.

Status: Ongoing- The City of Des Plaines continues to participate in the Storm Ready Program.

Action Item 8. Improve Emergency Response: As an IEMA Accredited Emergency Management Program, the City of Des Plaines is required to have an Illinois Emergency Management Agency Multi-Year Training and Exercise Planning Plan (2012, 2013 and 2014) and follow the FEMA Homeland Security Exercise and Evaluation Program (HSEEP).

HSEEP exercise and evaluation doctrine is flexible, scalable, adaptable, and is for use by stakeholders across the whole City. HSEEP doctrine is applicable for exercises across all mission areas—prevention, mitigation, response, and recovery. HSEEP supports the Des Plaines Response Plan by providing a consistent approach to exercises and measuring progress toward building, delivering, and sustaining core capabilities. The City has met all the requirements for the past three years (beginning in 2011), and will continue to meet the requirements while examining approaches to enhance protection of life, health, safety and property in the City for all hazards.

Benefits: Early recognition of an impending flood or other hazards can save lives and prevent property damage. Plans and annual exercises help City staff take appropriate actions before an event occurs. With the proper response actions, much property can be protected at a relatively low cost to the City. A plan that has been carefully prepared, and that utilizes all available data on the hazard and its potential impact, and that is regularly exercised will make the City's flood response activities more effective and more efficient.

Status: Ongoing- The City of Des Plaines actively participates in training program. The Homeland Security Coordinator trains and updates personnel to better respond to emergencies and disasters.

Action Item 9. Regional Stormwater Management: Actively participate in regional stormwater, flooding, and watershed activities, including the Metropolitan Water Reclamation District's stormwater management planning, the Northwest Municipal Conference's Stormwater Management Committee, and the Upper Des Plaines River Ecosystem Partnership. Help make their efforts effective and to the benefit of the City of Des Plaines. The new authority given to the MWRD makes this especially important. The Director of Public Works and Engineering is on the committee to draft the first storm water ordinance for Cook County, Illinois.

As previously mentioned, the City has hired engineering consultants to perform numerous flood studies from the 2008 flood and the 2011 flood. Their recommendations were used to design projects that were built as stated in the flood control project section (10.3.8)

Benefits: Development outside the floodplain and outside the City can contribute to increased flooding and water quality problems in Des Plaines. By monitoring and participating in activities in the upstream watershed, staff can ensure that actions by others will not be detrimental to the City. Working closely with MWRD programs will help the City make maximum use of the District's funding programs. Better coordination with others in the watershed can improve the City's CRS credit for stormwater management, too.

Status: Ongoing- The City participates in many committees in regards to storm water management. The Director and Assistant Director of Public Works and Engineering actively participate in the Upper Des Plaines Watershed Committee and Lower Des Plaines Watershed Planning Council.

Action Item 10. Urban Forestry: Continue the City's policies and programs to maintain trees that threaten utility lines and buildings. Continue the cost sharing program with residents that want to replace removed trees with trees appropriate for the location. The City is currently removing all ash trees that are infected with the emerald ash borer.

Benefits: A properly written and enforced urban forestry program can reduce liability, alleviate the extent of fallen trees and limbs caused by wind and ice build-up, and provide guidance on repairs and pruning after a storm. Continuation of the current activities will ensure the City's continued status as a Tree City USA.

Status: Ongoing- The City of Des Plaines continues to maintain trees and removes storm damaged ones. The City has numerous certified arborist on staff as well.

Action Item 11. Rebates: Continue and expand the rebate program to provide a financial incentive for low cost retrofitting projects that protect properties from natural hazards. The current programs to fund surface flooding, drainage, and sewer backup protection measures will be continued. The City will explore using general funds to expand the program to include other protection measures, such as tornado safe rooms, lightning rods, and earthquake protection like strapping water heaters and cabinets to the wall. The City also had a generator rebate program which was greatly received. The rebate money that the city offered was used up in a matter of hours.

The Des Plaines city council in 2011 budgeted \$50,000 for a rebate program to help subsidize the purchase of portable generators by residents affected by power outages. Residents who are considering purchasing new generators as well as homeowners who already bought one as of June 1, 2011 would be eligible to apply for the program. The city rebate would cover 50 percent of the cost of a portable generator up to \$250.

A typical portable home generator powered by gasoline, ranging in capacity from 1,800 watts to 8,000 watts, could cost roughly \$400 to \$1,000. Automatic, standby generators that run on natural gas and kick in during a power outage to power an entire house can cost between \$3,000 and \$10,000.

Annual Report 7 October 2014

Benefits: A 30% rebate for a project means that for every dollar spent by the City, \$5 will be spent to protect a property from damage. This has been shown to be a real cost saver compared to Public Works and Engineering Department projects like drainage improvements and replacing pipes.

Status: Ongoing- The City of Des Plaines continues the rebate program for residential flood control that it instituted in 1994. The annual budget for these rebates is \$150,000.

Action Item 12. Drainage System Maintenance: The City will continue to notify the Metropolitan Water Reclamation District's Small Streams Maintenance Program (SSMP) when there is an obstruction in the tributary creeks to the Des Plaines River so there small streams group can clean them. We also clean ditches and swales on an as-needed basis. The procedures and CRS credit will be reviewed as part of Action Item 3 to ensure that the City will receive the maximum possible CRS credit for drainage maintenance.

Benefits: A plugged culvert or storm sewer inlet can result in flooding during a small rainstorm. By inspecting and maintaining the drainage system, potential flood problems can be identified and corrected before the next big rain. A proactive activity like this can prevent \$1,000's in flood damage, closed streets and threat to people.

Status: Ongoing- The City continues to maintain its drainage system by inspecting, cleaning and repairing the system annually.

Action Item 13. Flood Control Projects: The City will work with the Illinois Department of Natural Resources, the U.S. Army Corps of Engineers, and neighboring communities to complete the planned projects on the Des Plaines River and Farmers Creek. The City is facilitating talks between the Army Corps of Engineers, the MWRD, and the Illinois Department of Natural Resources in regards to reconstructing Big Bend Lake and constructing a levee.

Benefits: Studies by the Corps of Engineers and IDNR have shown these projects to be cost-effective approaches to reducing flood losses on the main stem of the Des Plaines River. The Corps' 1999 feasibility report estimated that the complete Des Plaines River package of projects will reduce flood losses by over \$6 million per year and have a benefit/cost ratio of 1.69 (pages 78 – 79). IDNR's draft Farmers/Prairie Creek report identifies cost-effective alternatives for Farmers Creek, but specific projects have not yet been selected.

Since 2008, the City of Des Plaines has spent almost 5 million dollars on flood mitigation. This mitigation includes both additional storm sewer and sewer separation. Please see table on next page.

Status: Ongoing- The City of Des Plaines has three Storm Water Master Plans that is has implemented since 1986. The City has partnered with the MWRD as well to implement citywide flood control projects.

Annual Report 8 October 2014

Action Item 14: Incorporate the *Hazard Mitigation Plan* into Other City Plans: When they are up for revision, the City's comprehensive plan and the zoning, subdivision, floodplain, and stormwater management ordinances will be revised to incorporate mitigation provisions, especially:

- Protection of new development from natural hazards
- Zoning of appropriate vacant floodprone areas and use of tools such as PUD, dedication, or acquisition, to preserve them as open space
- Mandating storm shelters in new mobile home parks
- Requiring all building sites in new developments to be above flood levels
- Requirements to bury utility lines has been adopted in section 13-2-5. W of the City Code.
- Prohibiting new critical facilities from the floodplain
- Prohibiting enclosures under elevated buildings to deter later modifications of the floodable areas
- Setting a lowest floor and lowest opening height standard on all new buildings built outside the floodplain. The City now has this standard. The top of foundation is to be 18" higher than the centerline of the street.
- Incorporation of best management practices in drainage and stormwater management facilities
- Continue to apply for Federal Grants. The \$30,000 Increased Cost of Compliance (ICC) money is not enough to raise any structures in Des Plaines
- The City is filling out a pre-application for additional funding for buyouts based on the Federal Declaration of the April 2013 floods.
- Establishing a permanent mitigation planning committee

The mitigation necessary to prevent the evacuations and minimize the damage that flooding causes would be for the City of Des Plaines to be granted the \$10.9 million dollars that they applied for in 2009 with the HMGP for buyout of 31 repetitive loss homes along with an additional \$55 million to buy out another 220 homes that experienced severe damage. Elevating these homes is not an option since they would lose their basements which would lower their market value considerably. Also, rescuing residents in these elevated homes would still be a hazard for our fire and police departments to access these homes.

Benefits: By incorporating mitigation provisions into other plans and regulations, more offices will be implementing mitigation activities, hazardous areas will be avoided, and new developments will be better protected.

Status: Ongoing- We use the HMGP in planning and updating the city code and in working with developers to prohibit development in the floodway, and to limit development in the floodplain.

IV. New Projects/Action Items or Revised Recommendations

No new projects, action items or revised recommendations are included in this year's report.