# **Kane County Natural Hazards Mitigation Plan**

Annual Report for 2015 September 26, 2016 City of St. Charles, Illinois

The City of St. Charles has adopted by ordinance the Kane County Natural Hazards Mitigation Plan. The goals, guidelines and action items of the plan are listed below.

#### Goals:

- 1. Protect the lives and health of the citizens of St. Charles from the effects of natural hazards.
- 2. Encourage self-help and self-protection measures to mitigate the effects of natural hazards on private property.
- 3. Protect critical facilities and public infrastructure with public funds.
- 4. Identify specific projects to mitigate damage where cost-effective and affordable.
- 5. Reduce the number of repetitively damaged existing structures.

#### **Guidelines:**

- 1. Focus natural hazards mitigation efforts on tornadoes, floods, thunderstorms and winter storms.
- 2. Encourage people to assume some responsibility for their own protection.
- 3. New developments should not create new exposures to damage from natural hazards.
- 4. Local initiatives should focus on protecting citizens and public property.
- 5. Seek county, state, and federal support for special projects.
- 6. Preserve open space in hazardous areas, especially where there are sensitive natural areas and agricultural lands.
- 7. Be consistent with existing plans.

#### **Action Items:**

# 1. Building Code Improvements

• The City has adopted the per Ordinance Number 2010-M-42 the 2009 International Building Code (Multi-Family/Commercial) and per Ordinance Number 2010-M-43 the 2009 International Residential Code (Single Family)

### 2. Improved Code Enforcement

• No items to report

### 3. Review of Plans and Development Regulations

• The City of St. Charles Engineering Design and Inspection Policy Manual was adopted in October 2009 and was updated in late December 2013. This manual contains the specification the installation of utilities and roadway, as well as inspection procedures. Erosion control details are now referenced to those provided by the Natural Resources Conservation Service as published in the Illinois Urban Manual, most current edition.

# 4. Retrofitting Incentives

• The City of St. Charles continued to offer residents a program to reimburse them up to 50% of the cost, up to \$2,500 total, to install backflow prevention on their sewer service. This program is meant to help residents that have experienced past problems with sewerage backups.

### 5. Repetitive Loss Projects

• No items to report

### 6. Drainage Maintenance

- The City first adopted a Stormwater Management Program Plan (SMPP) in 2009.
  The current version is considered effective as of January 1, 2010. The purpose of
  the SMPP is to meet the minimum standards required by the USEPA under the
  National Pollutant Discharge Elimination System (NPDES) Phase II program.
  The annual NPDES report was submitted to the IEPA in June of 2015.
- Ongoing inspection and monitoring of all open channels within the City. Cleanup of debris as needed.
- Ongoing monitoring of 7<sup>th</sup> Avenue Creek at Illinois, 8<sup>th</sup> and 9<sup>th</sup> Avenues.
- Detention basin inspections, both public and private, were conducted through the Community Development Department. Letters were sent to property owners if pond maintenance was required.
- A total of 1040 storm sewer structures were inspected, 220 storm structures were cleaned and 66,508 feet of storm sewer mains were televised in 2015.
- "No Dumping in Stream" signs are maintained at various waterway locations within the City.

# 7. Urban Forestry

- A proclamation for Arbor Day, April 24, 2015, was issued by the City of St. Charles.
- The City has an ongoing program to remove trees on public property that are diseased or found to be infected with Emerald Ash Borer. The City's GIS system is kept up to date with data related to the species of trees, which aids in the inspection process. For the year 2015, 276 dead and/or diseased trees were removed.

#### 8. Flood Threat Recognition

- The August 2007 Fox River flood was predominantly caused by extensive rain in the northern reaches of the Fox River watershed. River gauges north of the City can be accessed online to help predict how extensive the flooding will be in St. Charles. Continuing in 2015 a link has been made available on the City's floodplain page to the Fox River gauge in Algonquin, IL. Monitoring this gauge gives the City and residents time to respond to flooding along the river.
- Continuing in 2015 a link has been made available on the City's floodplain page to USGS gauge No. 05551200 on Ferson Creek. This gauge displays precipitation amounts, the volume of stream flow and the gage height on the creek.

### 9. Improved Emergency Response

• As part of emergency preparedness, the City was certified as a Storm Ready Community in 2014.

### 10. Flood Control Projects

- As part of the 2015 MFT program the City replaced 11 storm sewer structures and installed 5 new storm structures.
- As part of the 2015 MFT program the City replaced 44 feet of storm sewer and installed 359 feet of new storm sewer.
- 66,508 feet of storm sewer were televised in 2015.
- 1,040 storm sewer structures were inspected in 2015.
- 220 storm sewer structures were cleaned in 2015.
- During 2015 the City reconstructed a portion of 7<sup>th</sup> Avenue Creek near the east side lift station to address ongoing erosion problems. This work included bank stabilization and rip rap erosion control.

### Flood Control Projects, cont.

- During 2015 the City reconstructed 630 feet of Norton Creek Tributary south of Fox Glen Drive. This work included regrading of the creek channel, rip rap erosion control, weir installation, bank stabilization, and plantings.
- During 2015 the City continued the process of developing a concept plan for 7<sup>th</sup>
   Avenue Creek and 7<sup>th</sup> Avenue Creek Tributary. The goal of the concept plan is to
   address recurring flooding along the creek and tributary, minimize stream erosion,
   improve stream ecology, and identify options that will improve aesthetics and
   revitalize the neighborhood along the project corridor.
- During 2015 the City conducted public meetings in January and October for the 7<sup>th</sup> Avenue Creek and 7<sup>th</sup> Avenue Creek Tributary rehabilitation project.
- Continuing through 2015, the City has been in contact with FEMA and their contractors to verify the status of the remodeling of the existing flood insurance study from the Fox River to Kirk Road. A new flood insurance study and related mapping for 7<sup>th</sup> Avenue Creek from the Fox River to Kirk Road, and 7<sup>th</sup> Avenue Creek Tributary is anticipated to become effective in early 2018.

### 11. Hazard Mitigation Materials

 During 2015, two information brochures were made available to the public through the Public Works Engineering Division, the Building and Code Enforcement Office and the City of St. Charles website. These are "Selecting a Contractor, Flood Damage" and "Floodplain Information". These documents are updated on an as needed basis. Topics from the Floodplain Information brochure are regularly published in the City's monthly newsletter.

#### 12. Outreach Projects

- The City has created and continued to add content to a "Floodplain Page". Elevation certificates on file are available through the City's website, as well as FEMA Letters of Map Change. Also, there are numerous links to resources to assist residents with drainage concerns.
- The City mailed outreach letters to floodplain and repetitive loss property owners in 2015.
- The City mailed outreach letters to local lenders, real estate and insurance offices in 2015.

# **Outreach Projects, cont.**

• The most current Flood Insurance Study and mapping for the City of St. Charles is on file with the St. Charles Public Library. A number of FEMA publications have also been provide to the library by the City. These publications available can be searched on line at the St. Charles Public Library website, <a href="http://www.st-charles.lib.il.us/">http://www.st-charles.lib.il.us/</a>

# 13. Plan Adoption

• The City previously adopted the Kane County Natural Hazards Mitigation Plan per Resolution No. 2003-58. A resolution adopting the updated plan was passed in early 2011 per Resolution No. 2011-30. The Kane County plan has been update as of May 2015.

### 14. Mitigation Coordinating Committee

• No items to report

# 15. Community Rating System

• The City of St. Charles is a participant in the Community Rating System. The annual recertification in 2015 has maintained the City's current rating of Class 5.