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**ANNUAL EVALUATION REPORT FOR  
ALL NATURAL HAZARDS MITIGATION PLAN  
2015 CALENDAR YEAR  
FOR UNINCORPORATED LAKE COUNTY, ILLINOIS**

Prepared By: Lake County Planning, Building and Development Department

Prepared For: Lake County Planning, Building and Zoning Committee and Lake County Board

August 1, 2016

## **INTRODUCTION**

The Annual Evaluation Report assesses the implementation of goals described in the All Natural Hazard Mitigation Plan for Lake County, Illinois, within unincorporated Lake County, Illinois. All goal assessments are for the 2015 calendar year.

The Annual Evaluation Report for the All Natural Hazard Mitigation Plan within unincorporated Lake County, Illinois was prepared by the Lake County Planning, Building and Development Department. The Annual Evaluation Report was submitted to the Lake County Planning, Building and Zoning Committee, with a request to send the report to the Lake County Board for their information, and a Lake County Press Release was issued. The original [County-Wide All Natural Hazards Mitigation Plan](https://www.lakecountyil.gov/2369/All-Natural-Hazards-Mitigation-Plan) (<https://www.lakecountyil.gov/2369/All-Natural-Hazards-Mitigation-Plan>) and the [Annual Evaluation Report for the All Natural Hazards Mitigation Plan](https://www.lakecountyil.gov/2076/Reports-Studies) (<https://www.lakecountyil.gov/2076/Reports-Studies>) are available online.

## **GOAL ASSESSMENT**

### **Public Outreach**

The Lake County Planning, Building and Development Department prepared an annual Repetitive Loss Area Mailing, which targeted Repetitive Loss Properties and their surrounding repetitive loss area, and offered information on preparing for flooding, permanent flood protection measures, financial assistance, and flood insurance.

### **Remove High Risk Structures from Floodplain or Protect High Risk Structures**

The Lake County Planning, Building and Development Department approved four (4) permitted projects for elevating existing structures above the regulatory floodplain elevation to bring the structures into compliance with the Lake County Unified Development Ordinance in 2015.

### **Mitigate All Repetitive Loss Structures Identified by FEMA**

Two (2) permits of the four (4) permitted through the Lake County Planning, Building and Development Department was issued to elevate a repetitive loss structure above the flood elevation on a flow-through foundation in 2015.

The Lake County Stormwater Management Commission was awarded FEMA Hazard Mitigation Assistance funding in 2015 to acquire and demolish flood damaged homes in Lake County. Of the eleven (11) properties included in the application, five (5) are located in unincorporated areas of Lake County and include one (1) repetitive loss structure.

### **Improve Capacity of Drainage Systems**

The Lake County Planning, Building and Development Department implements a Drainage Improvement Fund within unincorporated Lake County, Illinois. The purpose of the Drainage Improvement Fund is to improve the capacity of drainage systems. The following projects were partially funded by the Lake County Planning, Building and Development Department Drainage Improvement Fund in 2015:

- Nearly 1,500 feet of existing storm sewer was replaced.

The Lake County Stormwater Management Commission's (SMC) Stormwater Infrastructure Repair Fund (SIRF) assists in resolving inter-jurisdictional drainage and flooding related problems (i.e., stormwater management system infrastructure needs). In 2015, SMC approved funding for the following projects in unincorporated Lake County: No projects in unincorporated Lake County.

SMC's Watershed Management Board (WMB) cost-share grant program helps fund local stormwater projects. The highest funding priority is flood damage prevention/mitigation but other project benefits are also included in funding decisions. In 2015, SMC approved funding for the following projects in unincorporated Lake County:

Vernon Township Olsen Street and Indian Creek storm sewer system enhancement replaced a failed clay drain tile previously causing flood damage to nearby houses.

Other SMC flood mitigation projects:

Completed the Vernon Township Indian Creek stabilization project designed to dissipate stream energy to maintain bank stabilization during high flows.

Launched countywide public and stakeholder input process to update the Comprehensive Stormwater Management Plan. Input will be compiled and identify issues and needs and identify opportunities that can help address those issues and needs. The plan is expected to be completed and adopted in 2016.

The development of an "umbrella" watershed-based plan for entire Des Plaines River Watershed (Lake County portion) will begin in 2016. The plan will provide priority action items to reduce flooding.

The Buffalo Creek Watershed-Based Plan was completed. Goals include flood reduction, green infrastructure, and smart development practices.

### **Acquire Properties in Flood-Prone Areas**

The Lake County Stormwater Management Commission was awarded FEMA Hazard Mitigation Assistance funding in 2015 to acquire and demolish flood damaged homes in Lake County. Of the eleven (11) properties included in the application, five (5) are located in unincorporated areas of Lake County and include one (1) repetitive loss structure.

### **Implement Maintenance Programs for Drainage Systems**

The Lake County Planning, Building and Development Department enforces the Lake County Code of Ordinances when reviewing and approving development plans. The Code requires all new drainage systems be maintained within drainage easements by a designated responsible party, and a Stormwater Management, Monitoring, and Maintenance Plan is required for systems involving a detention basin.

### **Reduce Inflow and Infiltration and Sewer Backups**

The Lake County Public Works Department (LCPWD) is committed to reducing sanitary sewer inflow and infiltration and sewer backups. A project that will assist in reducing the likelihood of sewer backups within the Northwest sanitary sewer service area, which provides service to incorporated and unincorporated areas, involves upgrades at an existing sanitary lagoon site and construction was completed in 2015. The site will allow

for temporary storage of over 15 million gallons of sanitary sewage providing relief during rain events.

The LCPWD continued flow monitoring within the Northwest and Southeast sanitary sewer service areas in 2015 to determine where inflow and infiltration could be reduced while maximizing the results given the available funding. The service areas included incorporated and unincorporated areas. Based on the results of previous flow monitoring efforts, smoke testing, dye flooding and manhole inspections were completed in 2015 within the unincorporated area of Ingleside. Over 11,000 linear feet of sanitary sewers were smoke tested, over 50 sanitary sewer manholes were inspected and 11 dye flooding tests were completed. When the results of all three processes are combined it assists in identifying and estimating the amount of infiltration and inflow into the sanitary system. This allows LCPWD to address issues with their portion of the sanitary system and provide backup for discussions with residents regarding repairs to their portion of the sanitary system. Per their Capacity, Management, Operation and Management (CMOM) Program the LCPWD has continued televising and cleaning sanitary sewers and performing preventative maintenance on pertinent portions of the sanitary sewer system to ensure the peak system capacity can be achieved

#### **Maintain Compliance with NFIP**

The Lake County Planning, Building and Development Department has maintained its status as a National Flood Insurance Program (NFIP) Community, while maintaining its status as a Class 6 Community in the NFIP Community Rating System, resulting in up to a 20 percent reduction in flood insurance premiums for unincorporated residents.

#### **RECOMMENDATIONS AND REVISIONS**

The Lake County Planning, Building and Development Department will continue to maintain Community Rating System status and will continue to work to reduce flood damages within unincorporated Lake County, Illinois through the implementation of the Drainage Improvement Fund, enforcement of floodplain regulations on individual permits, and completion of public outreach projects. The Lake County Public Works Department will continue to monitor sanitary sewer infrastructure and will work to address inflow and infiltration and sewer backups. The Lake County Stormwater Management Commission plans to pursue funding on an annual basis to continue to purchase flood-prone properties throughout the County.