



Buying Out Time

Full Mitigation Best Practice Story

Lake County, Illinois



Gurnee, IL - As far as natural hazards go, the Village of Gurnee in Lake County, Illinois, is primarily affected by the flooding of the Des Plaines River. In the autumn of 1986, Gurnee suffered from the most devastating flood in its history. Since then, Gurnee has taken extraordinary steps to lessen flood damages to its properties, and the positive results can already be seen.

During the last week of August of 2007, Gurnee was once again threatened with rising floodwaters from the Des Plaines River. However, the effects of the flood were minimized thanks to two main mitigation efforts. The first was a wetlands restoration project that was recently completed by the Lake County Forest Preserve in an area north of Gurnee. The second involved a series of property acquisition projects pursued by Gurnee in the last 20 years.

“We are really excited,” said the Mayor of Gurnee, Kristina M. Kovarik. “This was the first time we had a flood of this magnitude and no major damages.”

Wetlands are areas that receive and accumulate floodwaters, thereby slowing and reducing downstream flows. They also serve as natural filters, improve water quality, and provide habitat for many species of fish, wildlife, and plants.

Over the centuries, many modifications to the landscape for agriculture and urban uses have significantly increased flooding from the Des Plaines River. The growing need for solutions to this problem resulted in the Des Plaines River Wetlands Demonstration Project. This project was formed in 1983 as a joint venture between the Lake County Forest Preserves and the Chicago-based Open lands Project.

Using funding provided by federal, state and local governments, foundation grants, and individual donors, the Wetlands Demonstration Project has transformed abandoned farm fields and gravel quarry pits into a rehabilitated ecosystem along the upper Des Plaines River in Lake County.

Restoration began in 1986, and the results have been very rewarding, especially for the residents of Gurnee, since the restored wetlands played a large role in delaying flood waters and reducing flood heights this last August.

“In the past, the waters came up really fast,” said Mayor Kovarik, “but this time we had a window of opportunity of almost 48 hours to get sandbags in place before the river reached any homes, businesses, or public buildings. We were also able to keep all major traffic routes open.”

After being selected by the Lake County Stormwater Management Commission (SMC) as a pilot for a community-wide plan in 2000, Gurnee started to aggressively pursue a Flood Mitigation Plan. Having a plan has opened doors for federal and state grants, and it has raised awareness in the community. Gurnee’s Flood Mitigation Plan provides carefully considered directions to ensure the best use of public funds.

In 2003, Gurnee received a little over \$600,000 from a Pre-Disaster Mitigation Grant from the Federal Emergency Management Agency (FEMA), which was administered by the Illinois Emergency Management Agency (IEMA). They also received approximately \$240,000 from the Illinois Department of Natural Resources (IDNR).

These grants helped them purchase five properties and remove them from the floodplain. Since 1986, Gurnee has successfully removed almost half of the 45 structures on the floodplain and returned those properties to open space, often using their own money when grants were not available.

Mike Warner, SMC Executive Director, said, “The Village of Gurnee has taken advantage of every opportunity to partner with Federal, State, and County agencies to remove at-risk floodplain structures, plan for disaster preparedness, and educate the public regarding flood hazards in order to minimize flood damages in its community. The Village has set a great example for other communities to follow.”

Gurnee's village officials understand that it takes a combined effort, effective planning, and long-range vision to accomplish their goals. Mayor Kovarik says that "The Village is very pleased that their flood mitigation plan has already begun to pay off." She believes that "sometime in the future the Des Plaines will flood and it will be a non-event in the Village of Gurnee."

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region V**

State: **Illinois**

County: **Lake County**

City/Community: **Gurnee**

Key Activity/Project Information

Sector: **Public/Private Partnership**

Hazard Type: **Flooding**

Activity/Project Type: **Acquisition/Buyouts**

Activity/Project Start Date: **08/1986**

Activity/Project End Date: **Ongoing**

Funding Source: **Hazard Mitigation Grant Program (HMGP); Local Sources; State sources**

Application/Project Number: **1469**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **No**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1729 , 09/25/2007**

Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: <http://www.fema.gov/hazard/flood/index.shtm>

Reference URL 2: <http://www.floodsmart.gov>

Main Points

- Gurnee, IL was continually affected by flooding from the Des Plaines River.
- Decided to take steps to lessen damages to property after the 1986 flood.
- Two main mitigation efforts - a wetlands restoration project and a series of property acquisition projects.
- The wetlands project, formed in 1983, used various forms of funding and transformed abandoned farm fields and gravel quarry pits into a rehabilitated ecosystem.
- With regard to acquisition, grant money helped to purchase five properties and remove them from the floodplain.
- Since 1886, half of the 45 structures have been successfully removed from the floodplain and onto open space.
- Mitigation test in August 2007 and the effects of the flood were minimized because the wetlands helped delay the flood waters and reduce the flood height while properties that used to be in danger were moved out of harm's way.



Home being demolished



Flooded home during 2004 flood



Location of home acquisition