

“Flood Amnesia” Cured by Public Education

La Salle County, Illinois

Ottawa, IL –Ottawa, Illinois is located in a beautiful valley at the confluence of the Fox and Illinois Rivers. But it is this location that has caused the City to suffer from significant flooding events and the subsequent damage from those events.

In recent history, Ottawa has had significant flooding in an area of town known as “The Flats”. Flood waters in this area reach 8 to 10 feet on a fairly regular basis. Recent flood events have been recorded in 1974, 1982, 1983, 1996, 1997, 2007, 2008 (record flood) and 2009. In the flood of March 2009,

almost no damage was recorded due to mitigation and flood control efforts taken by the City.



The National Flood Insurance Program (NFIP) encourages communities to participate in the Community Rating System (CRS). The Federal Emergency Management Agency (FEMA) initiated the CRS to reward communities that are doing more to prevent or reduce flood losses than the minimum requirements of the NFIP. By participating in the program, communities are better equipped to handle flood events. Certification requires them to establish flood control measures that ultimately,

protect people and property. Not only do the risks for residents decrease by participation in this program, but the costs for flood insurance can be dramatically reduced by a good rating (from 5 to 45% discounts). The rating system runs from Class 1 to Class 10, with a Class 1 being the highest or best rating available. Ottawa joined as a Class 5 community in October 2010. By achieving this rating, the City helped secure discounts of 25% on flood insurance policies for its residents.

Achieving a Class 5 rating wasn't a quick or easy process. The City made formal application in March 2009 and was certified on October 1, 2010. But the work began long before the application was submitted. Ottawa's Building and Zoning official, Mike Sutfin, said the process had been in the works for about nine to ten years. To receive a CRS rating, credit is given for a variety of community flood protection activities. The activities are divided into four categories: Public Information; Mapping and Regulations; Flood Damage Reduction; and Flood Preparedness. Some of the efforts of the community are summarized below for each of the four categories.

Public Information and Education was an important part of the CRS process. It seemed the residents had “flood amnesia” from one flood to the next. Residents were unwilling to take steps to protect them from the next flood, hoping it wouldn't happen again. But the city staff knew it wasn't a question of *if* but *when* the next flood would hit. As a part of the CRS public education activities, the City held outreach meetings in conjunction with FEMA public meetings.

Ottawa also formed a Flood Commission comprised of staff and residents. Meetings were scheduled with the Flood Commission to hear experts on many topics dealing with flood control and the impacts of flooding. Speakers from the National Weather Service, the Illinois Department of Natural Resources (IDNR) - Office of Water Resources, the Illinois Insurance Services Office, the United States Army Corp of Engineers (USACE), the Red Cross and local utility companies were invited to attend these meetings. Not only was this an opportunity for public education, but the city staff and Flood Commission members learned more about flooding and its impact on Ottawa. They also learned how large an area actually impacts flooding in Ottawa. With both the Fox and Illinois River running through the city limits, they knew the potential flood impact from these was great. They also found that many watersheds converge and drain into the Ottawa area; as much as 12,000 square miles! Current and future development and weather events from Chicago south to Ottawa can and will have a huge impact on the City.

Other public education efforts include the City's website. On the site, residents can find early warning flood information on both the Fox and Illinois rivers. They can see current river stages and during times of flooding, what property throughout the city will be impacted at each stage. Information about cleaning up after a flood and what to do in the event of a flood is also available on the City's website at: www.cityofottawa.org.

Mapping and Regulatory Activities have also been a focus for the City. The regulatory ordinances regarding zoning, storm water management and floodplain development include higher standards than regulations in other communities to ensure that new development meets and exceeds flood standards for protection. Open space preservation is an important part of this and the City has exceeded these development requirements and also requires larger lot sizes than many communities.

Flood Damage Reduction Activities include acquiring and relocating flood-prone buildings out of the floodplain. From 1998 to 2010, the City acquired approximately 60 properties in "The Flats" area. All of these properties were classified as Repetitive- Loss Properties (RLP) and FEMA's Hazard Mitigation Grant Program (HMGP) funds were used to purchase them. In 2010, the city was working to purchase eight more of the properties and if successful, only three repetitive loss properties will remain in the entire city.



Fox River Park is the result of these buy-outs and today this public open space includes water fountains for kids, a disc golf course, basketball court, playground equipment, a picnic shelter and a public boat launch with boat docks. The River Walk also runs through the park, creating an enjoyable recreational opportunity and setting for residents and visitors to the area.

In 2009, other mitigation efforts included the city working with the school district to purchase the Central Middle School property. The school flooded badly in 2008 and was determined to be substantially-damaged. After the flood, students were displaced and scattered for the remainder of the school year.



Central Middle School-2008

With assistance from FEMA (about \$1 million), the Wal-Mart building was retrofitted into a school where classes were held in 2010. A new middle school is being built with assistance from FEMA funds (\$10.5 million dollars) and an additional \$15 million in state funds.

The City also worked with the Army Corps of Engineers (USACE) to construct levees and flood protection walls around the Ottawa High School (1998) and the Ottawa Regional Hospital (2008) to protect from them further

flood damage. A local road, Green Street, provides secondary access to the entire east side of Ottawa and should be elevated to 475' (it currently floods at 468'). The only other access is via the Main Street Bridge. If a flood event occurs near the new base flood elevation (474'), the Main Street Bridge would be closed as the water/debris would be impinging on the low steel girders. This would seal off any ingress/egress to the entire east side of the City and hundreds of homes could be cut off during flooding. The City is currently working with the IDNR and USACE on raising the levees to meet accreditation and also on the Green Street elevation project. A key element of these projects hinges on the acquisition of the remaining homes in the "Flats" area as raising the levees could possibly create more flooding in this area.



The Hospital (2008) –pre- flood wall

Flood Preparedness Activities received much attention from the City. Early warning systems are in place and utilize the City of Ottawa's Emergency Notification System (CENS). When certain areas of town are under flood warnings, an automated call system is activated and residents in that area are notified of the warning. The system also informs the city of those residents who may not have received or responded to the call so they know which doors to knock on first for further warning in the event of an evacuation. Also, as mentioned earlier, the city website includes information on both the Fox and Illinois Rivers and their current levels and flood stages.

During the process to achieve a CRS rating, a challenge was added to an already busy schedule for city officials. In the fall of 2010, new flood maps were made available. The base flood elevation (BFE) was raised almost two feet from the old maps. A new development, Heritage Harbor, was caught in this transition. Ultimately, the developers had to raise utilities that had already been installed and the elevation of the entire Heritage Harbor development was raised about two feet to ensure that the future homes would be out of the floodplain.

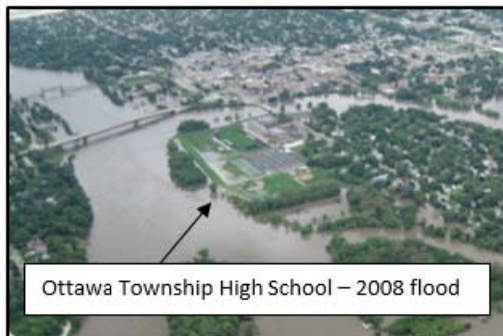
With the new BFE's, approximately 60 to 100 *developed* properties found themselves in the flood plain that previously had not been included. For property owners, this meant a large increase in flood insurance policy rates and limitations on future development. Currently, elevation certificates are being developed for most of these properties with cooperation from private property owners. Once the more

detailed surveys were completed, many properties have been found to be outside of the special flood hazard areas (SFHA) because of their *actual* elevations.

The City of Ottawa is currently working toward becoming a Class 4 CRS community and if successful, would become the first Class 4 in the Midwest, and would join only nine communities nationwide that are a Class 4 or better. Their hopes are to become a Class 2 by 2012.

Some activities yet to be completed that will provide even better flood control and help the City gain the Class 2 rating are:

- Acquire and demolish/relocate eight homes remaining in “the Flats” area
- Elevate Green Street to elevation of 475’
- Raise the levee by the High School to achieve accreditation (8 additional buy-outs are critical)
- Clean the debris from the Aqueduct (IDNR)
- Bank Stabilization of approximately 900 feet along the Fox River, across from the Fox Levee and just downstream from Fox River Park
- Complete the Watershed Study
- Complete the update of the Storm Water Management Ordinance



Achieving a Class 5 rating is an impressive accomplishment and attaining an even higher classification would further ensure that the residents of Ottawa are being protected by the best possible flood control methods, thanks to the combined efforts of residents, City staff and elected and appointed officials.