

Winter 2013-2014 Newsletter

#### Students Safe, Sandbags a Memory: The Gurnee Grade School Floodplain Buyout Project

~Susan Vancil, Lake County Stormwater Management Commission

The sandbags were in place, the students evacuated, and the river rose. It was a regular occurrence at the former Gurnee Grade School. located in Gurnee, Illinois. The school was built in the 1950s before floodplains were identified, and located within 600 feet of the Des Plaines River in what is now mapped as floodway. As the watershed changed and storm events intensified, the school regularly flooded, and sandbagging efforts assured regional and national media attention.



The Gurnee Grade School during the 2007 flood event.

The cost of responding to each flood, including sandbagging efforts, relocating students to offsite classrooms, and clean up and remediation reached \$300,000 per event. Gurnee Grade School District 56 needed to find a permanent solution to the flooding. Engineering studies and mitigation best practices determined the most economically feasible alternative was to remove the building from the floodplain and restore the flood-prone site to open space. District 56, Lake County Stormwater Management Commission (SMC), Village of Gurnee, and Gurnee Park District worked together on funding, acquisition and demolition, and a site restoration plan. Additional funding was needed to gain local support and enable the School District to focus its economic capabilities on building a replacement school outside of the floodplain.

SMC received a \$3.2 million Illinois Department of Commerce and Economic Opportunity "IKE" grant to acquire the school and a \$750,000 Illinois Emergency Management Agency grant to fund demolition and site restoration. Demolition was completed in November 2013 and site restoration will be completed in spring 2014. The Gurnee Park District will take ownership of the restored site designed with soccer fields, an open air shelter, and historical marker.

"The partnership of local, state and regional agencies, led by District 56, was vital. We were on the same page and focused on the students and community throughout the project," said Mike Warner, SMC Executive Director.

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The Illinois Association of Park Districts agreed and presented its 2013 "Intergovernmental Cooperation Award" to the Gurnee Park District, SMC and District 56 for the project noting the partnership created a successful intergovernmental agreement that benefitted residents throughout the community.

In addition to the Gurnee Grade School, SMC and the Village of Gurnee have to date purchased nine repetitively flooded homes near the former school site.

For more information, view a video of the <u>September 30, 2013</u> <u>demolition event and brick giveaway event (video)</u>.



Christine Stack, Mitigation Division Director, FEMA Region V speaking at the demolition event and brick giveaway September 30, 2013.









# **IDNR Office of Water Resources Permit Application Fee Notice**

~Loren Wobig, P.E., CFM, IDNR Water Resources

To enable IDNR to continue to carry out its mission, the Illinois General Assembly passed the IDNR "Sustainability Act" (Public Act 97-1136) which became law in December 2012 and provides new revenue sources and reduces dependency on General Revenue funding. Among other provisions, this new act added language to the Rivers, Lakes and Streams Act (see 615 ILCS 5/35) that allows IDNR to collect a fee of up to \$5000 per application for permits issued under the Rivers, Lakes and Streams Act. Effective January 15, 2014, the Office of Water Resources will require payment of an application review fee prior to the detailed review of an application for permit. Except when possible through electronic fee payment coming soon to the Office of Water Resources web site, permit application fee payment must be in the form of a check or money order made payable to the Illinois Department of Natural Resources.

The IDNR Office of Water Resources has modified the Part 3700 Floodway Construction, Part 3702 Dam Safety, Part 3704 Public Waters, Part 3708 Floodway Construction in Northeastern Illinois, and Part 3720 Fox River Bridge Clearance administrative rules, effective December 27, 2013, to require applicants to pay application review fees. Further permit application review fee details, a listing of frequently asked questions related to the fees, and a summary of the application review fees are available on the IDNR Office of Water Resources Web site <a href="http://www.dnr.illinois.gov">http://www.dnr.illinois.gov</a>.

The collected fees will be deposited into the State Boating Act Fund for use by the IDNR alone to help defray a portion of the ordinary and contingent expenses of the IDNR, including hiring new regulatory staff, conducting dam safety inspections, reviewing delegated community actions, conducting floodway violation enforcement actions, and conducting floodplain assessments to identify and remove potential public flood hazards.

# **New Version of FIRMette - Desktop Available**

The Customer and Data Services team at Risk MAP is pleased to announce the launch of FIRMette – Desktop version 3.2.3, which is now available for download from the FEMA Map Service Center at <a href="http://msc.fema.gov">http://msc.fema.gov</a>. The FIRMette – Desktop application provides greatly expanded functionality over the FIRMette – Web tool.

Key features include:

- A customized method for users to access FEMA-provided mapping images
- The ability to query the FEMA Letters of Map Change (LOMC) Database
- Tools to generate flood map images with various levels of focus and fidelity
- Offline functionality enables users to work with previously downloaded documents and data

This latest release addresses known issues and enhances application functionality. If you have any questions about this release, please contact the <u>FEMA Map Information eXchange</u> at 1-877-FEMA MAP (1-877-336-2627).



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# FloodSmart Offers Tools and Resources to Help Communicate Flood Risk

~Abbi Boose, FloodSmart

In the United States, floods are the most common severe weather emergency. In the past 5 years, all 50 states have experienced floods or flash floods. In fact Illinois is no stranger to these kinds of conditions, with 7 flood declarations over the past 5 years. Yet a well-prepared and highly informed public can take the necessary steps to lessen the financial consequences of flooding.

With support from FloodSmart, the marketing campaign for the National Flood Insurance Program (NFIP), communities can better communicate the risk of flooding and importance of flood insurance to local residents. Shareable tools and resources easily accessed online from the FloodSmart Community Resources page provide dramatic, illustrative examples of flood risks and highlight the value and ease of purchasing flood insurance through thousands of insurance agents around the country. Several tools can be downloaded, shared or posted on community websites. These tools include:

- Flood Risk Scenarios—This downloadable tool illustrates common causes of flooding through animated scenarios. After the tool is downloaded to a community's website, visitors can click on a scenario to see examples of how and why it can flood.
- Cost of Flooding—This shareable tool shows that only a few inches of water can cause major damage to a home and its contents. It is an excellent way to illustrate the financial consequences of a flood and start the conversation for purchasing flood insurance.
- Widgets —During the year, FloodSmart creates and updates interactive widgets that can be downloaded and used to illustrate the risks of flooding. Widgets have been created for a variety of seasons and topics, including winter flooding, hurricane season, and flood-after-fire.
- Levee Simulator—This downloadable educational tool helps explain in simple terms how levees work, and shows the risk of living or working behind a levee. Using illustrated scenarios, users can see different ways that a levee can be breached, overtopped, or compromised through seepage and offers tips on how property owners can mitigate against damage.
- Testimonials—Online videos from people who have experienced flooding provide compelling, first-hand accounts of the consequences of flooding. These testimonials describe floods that occurred in different parts of the Nation from a number of sources, including coastal storms and levee breaches. They include both home and business owners who did and did *not* have flood insurance. Add links to the videos relevant to your area on your community website.

FloodSmart has developed a series of toolkits that community officials can use to promote flood insurance, assist in communicating the changes in flood risk due to map changes, and address levee issues. The mapping and levee toolkits contain templates for outreach materials and letters designed for communities to customize and use in their local outreach. The toolkits are available for immediate use at FloodSmart.gov/toolkits.

FloodSmart is also developing pilot programs for agents, stakeholders, and consumers. The communities are being selected based on flood history and on the willingness of State and local leaders to join FloodSmart in concerted efforts to communicate flood risks and the need for flood insurance protection. To learn more about this new effort— or for help on downloading these resources to your website—contact FloodSmart at info@femafloodsmart.com.



# Congrats to the Village of Royal: 22,000th NFIP Community

Congratulations to the Village of Royal in Champaign County, Illinois, which recently became the 22,000th participating community to join the National Flood Insurance Program! Local officials can learn more about the NFIP and the Community Rating System (CRS) here: NFIP CRS: The Local Official's Guide to Saving Lives, Preventing Property Damage, and Reducing the Cost of Flood Insurance

## **Vendor and Product Information**

IAFSM is providing the following list of vendors and products as a service to members who might find this information useful. This list is not an endorsement or recommendation by IAFSM or any member of the Board. Please contact each vendor individually for more information.

**US Flood Products** offers emergency solutions for personal property protection. We are offering a new product, FloodSaxs, which is an "instant sandbag" technology to help reduce potential personal property losses during a flood or water emergencies. http://usfloodproducts.com/

**Pipeblocks,** the system to eliminate ditch erosion, improve the environment, and control sedimentation fast and with very little cost. Brochures, pictures, and information can be acquired from <a href="www.pipeblocks.com">www.pipeblocks.com</a>, or call 815-210-999 or email niubob@msn.com.

**Bluestem Communications** (www.bluestemcommunications.org) is a nonprofit communications organization based in Chicago. We help engineers, municipal staff and coalitions engage the public on stormwater issues, meet MS4 education requirements and design Information & Education plans.

**Seiler Geospatial Mapping** provides the right tools and technology for those wishing to populate their GIS and CAD field data and get their work accomplished efficiently, productively and within budget. Contact via email: mapping@seilerinst.com or web: http://solutions.seilerinst.com

Jim Jolly Sales represents **SmartDitch**, a Manufacturer of channel lining solutions for Drainage, Erosion, Storm, Irrigation and Spill Control. Multiple sizes and engineering assistance. Contact: Mike@jimjollysales.com or 847-669-7570 www.smartditch.com & www.jimjollysales.com

**XP2D** is a dynamic 2D analysis engine coupled with the 1D of XPSWMM or XPSTORM. This coupled analysis provides realistic information for flood hazard mapping, evacuation route planning, NFIP modeling or stormwater master planning. Learn more at www.xpsolutions.com or email sales@xpsolutions.com.

**Unilock** is a manufacturer of concrete pavers, permeable paver and segmental retaining walls. Contact Unilock to learn about how permeable pavers can help with controlling stormwater flooding issues at <a href="https://www.unilock.com">www.unilock.com</a>.





# Blown Away by Floodplain Regulations

From the Chair, Loren Wobig, P.E., CFM, IDNR-OWR

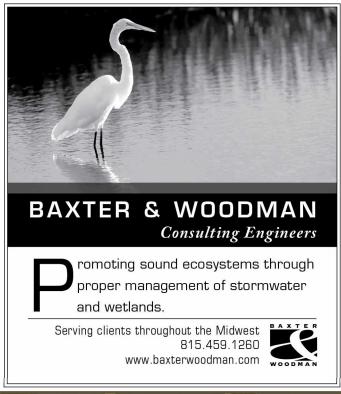
Your home was destroyed by a tornado. Now, you must rebuild it higher above the ground. While such a statement seems anti-intuitive, it is the message recently delivered to Illinois tornado victims whose substantially damaged structures are, or were, located in a mapped floodplain.

FEMA defines "substantial damage" (44CFR 59.1) as damage of <u>any origin</u> sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50% of the market value of the structure before damage occurred. Two key points to notice are: 1) the damage does not need to be caused by flooding – it can be caused by a tornado; and 2) the substantial damage rule applies to all such

structures in the floodplain regardless of flood insurance coverage. If the cost to repair the structure to pre-damage condition is more than 50% of the structure's market value, the lowest floor of the new or repaired structure must be above the base flood elevation at that site. It is also important to note that substantial damage is based on the cost to repair and not the cost of repair. It doesn't matter if the homeowner is a contractor, or has a brother-in-law who owns a lumberyard, substantial damage is determined based on the true costs and not actual costs.

Such is the plight of many homeowners in the little burg of Brookport, Illinois (population 1000) located east (upstream) of Superman's hometown of Metropolis on the banks of the Ohio River. On the treacherous afternoon of November 17<sup>th</sup>, a powerful tornado destroyed 50 structures in Brookport and substantially damaged as many more. Much of the village is mapped as floodplain due to decertification of their aging Corps built levee along the Ohio River, and therefore, subject to the community's floodplain ordinance and the substantial damage rule.

So was the arduous task of local, state and federal floodplain managers and administrators to explain to Brookport tornado victims how a troublesome levee system results in mapped flood risk in the community that includes a regulation that requires any substantial repair or replacement of their home be elevated further into the sky that damaged their home, above the flood elevation of the Ohio River located on the other side of the levee. This is not the first time this has occurred in Illinois. Both Plainfield and Utica have faced similar struggles following a tornado. In both communities, floods have come and gone since their tornados with minimal damage to their now elevated structures. So goes the interesting twists and turns of floodplain management in Illinois.





# We Need Nominations!

Once again, it is your opportunity to recognize the best. Send your nominations to the awards committee. The awards categories are:

# Floodplain Manager of the year

Recognizes outstanding individual efforts and contributions at the local level.

# **Outstanding Service**

Awarded to an IAFSM officer, a Federal, State, or Local Official, or a consultant who has gone above and beyond normal expectations and duties to promote or encourage IAFSM goals.

# **Stormwater Management**

Awarded to an individual or group who have improved stormwater management or reduced urban flood risks through creative engineering, regulatory measures, or other approaches.



# Mitigation

Given to an individual or community that has encouraged flood hazard reduction through a buyout program, retrofitting, preparation of a mitigation plan, or other similar mitigation efforts.

## **Journalism or Public Education Award**

Given to a media outlet that has produced floodplain or stormwater management special features during the year. The award can include individuals or agencies who have contributed to outreach and public awareness of floodplain or stormwater management issues.

## Legislation

Honors Illinois law makers or local officials for their efforts in floodplain issues. The award can also be given to an individual who makes extraordinary efforts to encourage the passage of legislation or to a community that has adopted unique local regulations that promote floodplain management or flood damage reduction.

## Lifetime Achievement

This award is the IAFSM's highest honor. It is reserved for outstanding longtime floodplain managers. These individual's long-term contributions have made a noticeable impact on floodplain and stormwater management efforts in the State of Illinois. This award is not always given on a yearly basis.

And our newest award category:

# **Natural Selection Award**

This "fun" award is given to the most unique, outrageous, or completely stupid floodplain activity identified in the past year!

Please email a brief description of the person or program and the award category to: paul.osman@illinois.gov. **Deadline for the awards submittal is February 14, 2014**. The awards committee may request additional information to support any submittal. The awards committee will review and vote on each nominee. Awards will be presented during the Annual Conference awards luncheon on March 13.

# **CEC Education & Training Opportunities**

Looking for training opportunities? The following opportunities are coming up in the next few months. If you are looking for credits, be sure to review the material and confirm they meet the appropriate requirements.

# **IAFSM Sponsored Training Opportunities:**

The IAFSM annual conference is just around the corner! See our website at www.illinoisfloods.org for updates.

#### Additional Training Opportunities:

- EMI provides a wide range of training opportunities. Coming soon:National Dam Safety Training Seminar (2/19-2/20), HEC-HMS (3/3-3/6), and Arc GIS for Emergency Managers (3/24-3/27)
  - o EMI courses are free for local and state gov't employees. http://training.fema.gov/EMI/

#### Webinars/ Online:

- STARR/FEMA, atkinsglobalna.webex.com and search by title, free-registration required
  - o Floodplain Development Permit Review, January 14th
  - o Inspecting Floodplain Development, January 16th
  - Association of State Floodplain Managers (ASFPM), Liability and Takings Issues in Floodplain Management, \$40/\$70 members/non, 12-1:30pm. https://attendee.gototraining.com/r/8828941286967929089
- USDA Natural Resources Conservation Service, Addressing Resource Concerns: Evaluating, Documenting, & Reporting Progress using NRCS' New Land Use Planning Criteria, January 29<sup>th</sup> 2-3pm, free. ASFPM link: http://www.floods.org/n-calendar/dayevents.asp?id=4050&type=11&date=1/29/2014

#### Out of state annual conferences:

• Michigan Stormwater-Floodplain Association Conference, Battle Creek, 3/5-3/7, http://mi.floods.org/

# **Alert: Road Construction near Annual Conference Site**

IAFSM members who plan to take local roads to the Annual Conference at the InterContinental Hotel (on River Road in Rosemont) may experience some construction detours and/or delays. IDOT is in the process of reconstructing Mannheim Road from Irving Park Road north to Higgins Road. IAFSM will send an email a few days prior to the conference with construction updates so you can plan your route accordingly. This construction is not expected to impact members who would take I-294 or I-90 to the conference.

# IAFSM Annual Member Meeting – Thursday 3/13 (Before Conference)

The IAFSM Annual Member Meeting will be held on Thursday, March 13 at 7:30 (before the Plenary on the second day of the conference). This is a very casual meeting and all are invited to attend. You're coming to the Conference anyhow, so wake up a little bit earlier, get a free breakfast, and hear all about the activities that your organization is planning. Member input and feedback is always encouraged and welcomed. Please join us!

# Great Lakes and Mississippi River Interbasin Study – Now Available Online

~Great Lakes and Mississippi River Interbasin Study website

The Great Lakes and Mississippi River Interbasin Study (GLMRIS) is a U.S. Army Corps of Engineers study that presents a range of options and technologies to prevent aquatic nuisance species (ANS) movement between the Great Lakes and Mississippi River basins through aquatic connections. Through a structured study process, USACE identified ANS of Concern established in one basin with the risk for transfer to the other, analyzed and evaluated available controls, and formulated alternatives with the goal of preventing ANS transfer between the two basins, specifically within the Chicago Area Waterway System. Read the study at <a href="http://glmris.anl.gov/">http://glmris.anl.gov/</a> and learn more at the Annual Conference, when Mr. Dick Lanyon (retired Executive Director of MWRD) speaks.

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# Important Stuff We Tell You in Every Newsletter...

# Save the Dates! 2014 and 2015 Conferences

The 2014 Annual Conference will be held March 12-13, 2014 at the InterContinental Chicago-O'Hare hotel in Rosemont. The 2015 Annual Conference will return to Bloomington-Normal and be held THURSDAY AND FRIDAY, March 12-13, 2015, at the Marriott Bloomington-Normal Hotel and Conference Center.

#### Wanted: Newsletter Ideas and Articles

IAFSM members, this is YOUR newsletter! Email Jennifer Maercklein, editor, at jmaercklein@v3co.com if there are topics that you'd like us to cover. You don't need to write the article - we just want your ideas! If you're gifted with a pen and would like to provide content, we welcome your written contributions as well.

### **Get Involved with IAFSM!**

IAFSM Committee Chairs welcome your help and involvement. See the list of chairs on the last page of this newsletter, or visit the committee webpage to learn more about volunteer opportunities. http://www.illinoisfloods.org/committees.html

# **Borrow our Water Table**

IAFSM has two Watershed Tabletop Models available for all members to check out (free of charge) and bring to Public Works Open Houses, Scout meetings, 4-H meetings, school classrooms, etc. This offers a great opportunity to educate about the dangers and impact of unplanned development and human activity in the floodplain. IAFSM keeps one in Springfield and the other in northeast Illinois. Contact Sarah at IAFSM@illinoisfloods.org to make arrangements.

#### **Next Board Meeting**

The next IAFSM Board Meeting will be held before the Plenary on the second day of our conference, at 7:30 a.m. on Thursday March 13. All members are welcome and encouraged to attend these meetings. See you there!

#### **Jobmart**

Visit our Jobmart at http://www.illinoisfloods.org/jobmart.html Jobmart is a free service to members of IAFSM. If you would like to post a position, send complete information to IAFSM@sbcglobal.net.

## **2014 CFM Exam Schedule**

To view 2014 exam dates and register, visit www.illinoisfloods.org/certification.html. There will be an exam offered on Tuesday night before the annual conference.







The IAFSM Newsletter is published quarterly for members of the Illinois Association for Floodplain and Stormwater Management. Information and opinions contained herein do not necessarily reflect the views of all members. Items for publication and other editorial matters should be directed to the editor at jmaercklein@v3co.com.

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For current Job Postings and CEC Training Opportunities, visit our website at illinoisfloods.org

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