

# THE IAFSM CURRENT

Illinois Association for Floodplain and Stormwater Management

Summer 2020 Newsletter

## **HEY!!! Somebody is Blocking the Ditch! Can They Do That??**

This happens a lot. One neighbor blocks a small creek or drainage ditch. The other neighbor, rightly concerned about flooding, complains. Unfortunately, this small drainage way is NOT mapped as a floodplain and if it is in an easement, the language is vague or only specifies rights to the land for traditional utilities.

In Illinois, state authority is limited to the floodway of streams with one square mile drainage area (urban areas) or 10 square mile drainage area (rural area). Typically, streams that do not meet these drainage thresholds remain unmapped, leaving the state with no authority. So, how can a community help the concerned neighbor? Three options are available to address these small obstructions:

#### The Illinois Municipalities Code, 65 ILCS 5/Article 11 -

This gives municipalities the authority to maintain drainage. Communities may remove obstructions after providing written notice to the owner 10 days prior to removal. Communities are also responsible for any damages caused in the removal. If the obstruction is in a dedicated easement, the community may have the authority to require the owner to remove the obstruction or reimburse the municipality for the cost of its removal.



The Illinois State Model Floodplain Ordinance – The majority of communities in Illinois have adopted the state model floodplain ordinance. Under the definition of "Floodplain" (Section 2), is an often-missed sentence: "Floodplain also includes those areas of known flooding as identified by the community". This somewhat vague sentence was included by design. It is there to give local officials the ability to enforce floodplain regulations in smaller, unmapped, flood risk areas.

**The Illinois Drainage Act** – Drainage laws in Illinois are based on a simple premise: one neighbor cannot alter natural damage and cause damage to another. As an agricultural state, it makes sense that the Drainage Act has been legally enforced hundreds (perhaps thousands) of times in Illinois. Those court cases have validated a variety of drainage issues:

- A landowner must receive surface water flowing natural from higher ground to lower ground.
- A landowner may collect surface water, discharge it, and hasten its flow to lower ground.
- A landowner may drain surface waters into a watercourse.
- Landowner cannot increase drainage flows unreasonably.
- A landowner has no right to obstruct the flow of surface waters which damage neighboring property.

In a nutshell, under the Illinois Drainage Act, one landowner cannot alter natural flow if it causes damage to another landowner. In Illinois, "the Golden Rule" is enforced by law: Do unto others...

For more information on Illinois Drainage Law, a very good (and easy-to-read) summary prepared by the University of Illinois is available on-line. The summary includes an appendix listing case law. Simply search "Illinois Drainage Law" or "U of I Cooperative Extension Services Circular 1355".

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### Lifetime Achievement Award to Paul Osman

Huge congratulations to Illinois' own Paul Osman, who is the first ever recipient of the Community Assistance Program – State Support Services Element (CAP-SSSE) Lifetime Achievement Award! This honor was bestowed upon Paul at the Annual Association of State Floodplain Managers (ASFPM) national conference, which was held virtually in June.

Paul is the Chief of Statewide Floodplain Programs at the IDNR – Office of Water Resources. Loren Wobig, Director of the OWR, wrote, "Paul knows more about every floodplain of every NFIP community in Illinois than anybody else and has stood in about every floodplain of every NFIP community in Illinois. Paul is more than a floodplain manager, he is an activist for floodplain management and engages with Illinois communities to get things done to reduce flood risk and flood damages in Illinois before, during and after floods. I believe Paul sees his work more as mission than a job. He has been a faithful disciple of sound floodplain management for the benefit of Illinois citizens."

#### **Awards**



#### **CAP-SSSE Lifetime Achievement Award**



FPMD CAP-SSSE









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## **Are Field Tiles Increasing Flooding?**

Another record flood season has once again sparked the debate: Are field tiles increasing flooding? This compliant is heard at virtually every public flood meeting.

Over the last century, grassed waterways, border strips, and contour planning have all but disappeared in Illinois to be replaced by field tiles. To the IAFSM urban members, we are talking about subsurface perforated plastic pipes installed in fields which outlet to local creeks or drainage ditches. Once tiled, fields can more quickly drain excess rainfall.

You can't blame struggling farmers. Without tiles much of Illinois would be uncultivated wetlands like it was in 1800s. More acreage in crops means much needed income.

So, do tiles increase flooding? The short answer is probably not much, at least within the context of large floods like 1993, 2008, 2013, and 2019. The soil types, the topography, the watershed, and the specific tiling all factor into the equation. Ultimately, the same amount of water ends up in the rivers. The long answer gets much more complicated.

In 2012, a University of Iowa study show that tiling can actually moderately decrease peaks at both the field and watershed level for certain storm events. Sloan et al. (2016) stated "...there exists a threshold rainfall magnitude (5–6 cm/day for most Iowa soils) over which there is minimal effect of subsurface drainage. For smaller events, tiling routes the flow through the subsurface and keeps the soil drier, which increases infiltration and reduces surface runoff while increasing subsurface flow."

Iowa studies have also shown that tile drainage does appear to substantially increase total stream flow over the course of



a year. Schilling and Helmers (2008) found that tile drainage "increases annual baseflow (flows between rainstorms) in streams, with seasonal increases primarily in the late spring and summer months. Thus, tile drainage...may have been a significant contributor to increasing baseflow in Iowa's streams over the 20th century." Other research in Illinois and Minnesota have shown much the same thing, with tile increasing annual flows 30-50% over the last century but not having major impacts on flood peaks.

On our soils, given our topography, in our watersheds, drainage tile does not appear to increase flooding issues downstream. Ultimately, the real problem is more frequent and larger rain events. Thermometers, rain gages, and stream gages do not lie. They are all increasing in Illinois. The problem with this extra rainfall is that it has to go somewhere. Levees, dams and drainage can help control the flow, but the precipitation trend shows that flooding is not going to get better anytime soon.





## **What About Those Busy Beavers?**

-Marilyn Sucoe, P.E., CFM, IDNR-OWR

It is summer and soon, the calls will start pouring in about beaver dams and muskrat problems. In rural, Illinois, these problems are often solved with a .22 (sad, but true). In urban locations of Illinois, the solution requires more planning, more compassion, and much less gunfire.

Illinois has regulations regarding beaver dam removal. Local officials or property owners may remove the dam only, as long as the lodge or den is separately located away from the dam. Often the lodge is built upstream of the dam, but if you don't see a separate lodge, you can either observe the beavers to find the lodge or you must assume it is in the dam itself.

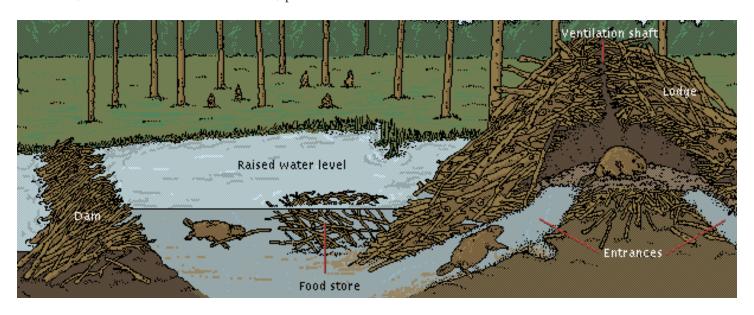
State law prohibits you from removing the lodge. In the state's wildlife code, 520 ILCS 5/2.32, from Chapter 61, it reads:

Sec. 2.32. It shall be unlawful for any person at any time to molest, destroy or attempt to destroy any feed bed, nest, den, house or other cavity of any of the wild mammals protected by this Act except as provided in Section 2.37. For the purpose of this Act, a feed bed is defined as a mound, pile or mat of

branches, cattails or other vegetation call gathered and piled by muskrats or beaver. (Source: P.A. 85-152.)

Beavers may also be removed under a nuisance animal removal permit from the Illinois Department of Natural Resources. You can request a permit at <a href="www.wildlifeillinois.org">www.wildlifeillinois.org</a> under the "Get Help" tab, select "Remove Wildlife". There are also several companies that can trap beavers. The list can be found at the same website, under the "Hire a Wildlife Control Operator". The USDA – Wildlife Services may also help you legally dispose of the beaver. Contact the USDA Illinois Wildlife Services State Director at 217.241.6700.

If you have a culvert blocked by debris, it may be a beaver dam, but you must first confirm that it is not a lodge or den. Inspect and monitor the blockage for wildlife activity. If it is not a lodge or den, clear the blockage or partially remove. Inspect again to see if repairs or new work is being done. If so, it is likely beavers or muskrats and you may need to remove the nuisance animals.







## From the Chair: (& Past-Chair): Virtual Conferences

-Erik Gil, P.E., CFM, Christopher B. Burke Engr, Ltd., and Glenn Heistand, P.E., CFM, ISWS

By the time you receive this newsletter our hot summer days will have been here for at least a couple of weeks. Due to our inherent optimism, back in March many of us were hoping the pandemic would be under control by now, but as newscasts point out, we are seeing a resurgence. Unfortunately, many of us have had to adjust our summer vacations due to the Covid-19 pandemic. On an interesting note, all the local bike shops seem to be sold out of new bikes, and if you've been out visiting trails and forest preserves you know where the bikes ended up.

Due to the possible lasting condition of our current situation, IAFSM will continue to investigate virtual options for next year's conference. Last month, ASFPM had their annual conference on a virtual platform. Unfortunately, I was not able to attend, but our Past-Chair, Glenn Heistand, did attend. I asked Glenn to provide us with a summary of his experience, which is provided in the remainder of this article. (Thank you, Glenn.)

ASFPM blazed a new trail at this year's annual conference, pulling off a quickly organized and well executed virtual conference in response to the Covid-19 pandemic. The conference was originally planned to be in Fort Worth, TX, but as travel restrictions and social distancing rules became the norm this spring, it was clear that the conference plans would need to adjust.

The virtual conference was a big success! Because of the ease of attendance, reduced conference registration fees, and no travel expenses, a record number of attendees were able to participate in the virtual conference. Besides the plenary and concurrent session presentations, a virtual exhibit hall was available with nearly 40 vendors ready to engage participants in real-time.

One of the best benefits of holding the conference completely online is that every session was recorded and available for future viewing by registered attendees. The ASFPM virtual Exhibit Hall with presentation links can be found here <a href="https://www.pathlms.com/asfpm">https://www.pathlms.com/asfpm</a>.

There were also several evening virtual events for those who wanted more social engagement. More than a few people commiserated that they missed the great food and personal interactions with friends that usually accompany the ASFPM conference, but the benefits generally outweighed the losses.

Being fortunate to moderate one of the virtual sessions, I found the behind-the-scenes technical aspects very interesting. Almost all the presentations were pre-recorded, to minimize technical glitches for the presenters, like dropped internet connections or malfunctioning computers. The presenters were all live for the Q&A sessions following each presentation, but their presentations had all been staged well in advance. The system's back-end with the moderator and the presenter was on Zoom, but the front-end seen by conference attendees was just a video window on a website. The result was a polished experience for attendees.

The IAFSM board is diligently paying attention to the lessons learned and the overall experience of the ASFPM virtual conference, in case we need to incorporate some virtual elements into the next IAFSM conference in March, 2021. I think it's fair to say that all conferences in the future will probably be a little different than we've been used to, and that's not a bad thing.

Additional Note from the Chair: Stormwater Committee Chair Opportunity Our long-standing Stormwater Committee Chair, Shauna Urlacher, has regretfully decided to step down due to an increase in her other commitments. We will miss her as she has brought us many short-courses and activities during her tenure. IAFSM is now seeking candidates for consideration to fill that position. Please email me at <a href="mailto:egil@cbbel.com">egil@cbbel.com</a> with your statement of interest and a brief bio.





## **Young Professionals Group Update**

The IAFSM Young Professionals Group has several exciting events planned for this summer. On Wednesday, June 24, Chris Hanstad and Brian Chaille at the Illinois State Water Survey, presented a webinar on LOMR and HEC-RAS 5 RAS Mapper Updates. Thank you so much for Chris and Brian for offering to present. We had great attendance for the webinar, and there was a lot of interest in the topic. For those who were unable to attend, we will post the recorded webinar and resources provided by Chris and Brian on the Young Professionals page

of the IAFSM website. <a href="https://www.illinoisfloods.org/about/committee/33/young-professionals-group">https://www.illinoisfloods.org/about/committee/33/young-professionals-group</a>

The YP Group is planning the next webinar and a virtual networking event later this summer. Please stay tuned for future updates. For more information on the YP Group or to get involved, contact Adam Blumstein, arblumstein@burnsmcd.com.

#### **IAFSM on Social Media**

Follow IAFSM on Facebook and LinkedIn! Please send any time sensitive announcements or ideas for content to Melissa Duyar at Melissa. Duyar@kimley-horn.com or Sarah Wenzel at <a href="SWenzel@prairieengineers.com">SWenzel@prairieengineers.com</a>



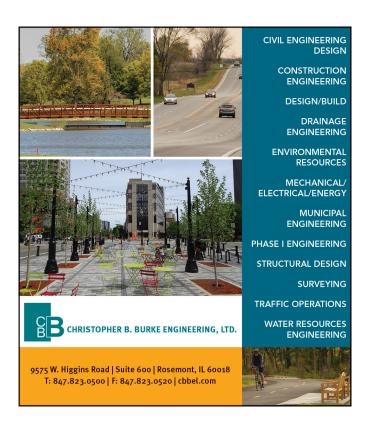
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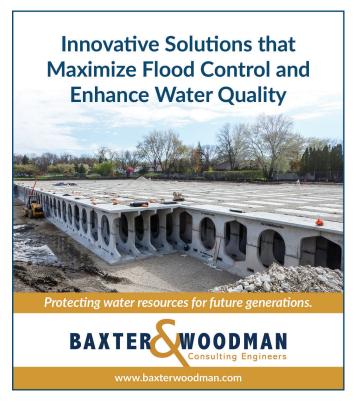
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LinkedIn:

https://www.linkedin.com/company/illinois-association-for-floodplain-and-stormwater-management/about/





## **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/ASFPM Sponsored Training Opportunities:**

None at this time.

#### FEMA:

The Building Resilient Infrastructure and Communities (BRIC) Summer Engagement Series will bring FEMA Subject Matter Experts and partners together one day a week during the month of July to discuss key elements of the newly developed BRIC program. These virtual sessions are geared towards leaders in states, local communities, tribes and territories, as well as private sector entities, private non-profit organizations, and individuals interested in learning more about the grant program. Each Wednesday in July from 2:00 p.m. - 3:00 p.m. Eastern Daylight Time (EDT), FEMA will host an engagement session. Learn more or register for the BRIC Summer Engagement Series. Summary of Topics. Each engagement will be recorded and posted online.

- Wednesday, July 15: BRIC and Building Codes. 2:00 p.m. to 3:00 p.m. EDT. This 60-minute session will provide a structured conversation around the importance of building codes, as well as building code adoption and enforcement as it relates to the BRIC program. Learn More or Register.
- Wednesday, July 22: BRIC and Community Lifelines.
   2:00 p.m. to 3:00 p.m. EDT. This 60-minute session will introduce community lifelines and how FEMA's grant programs support these efforts. Learn More or Register.
- Wednesday, July 29: BRIC and Nature-Based Solutions. 2:00 p.m. to 3:00 p.m. EDT. This 60-minute session will cover the value of nature-based solutions in building community infrastructure and resilience. Learn More or Register. This series does not replace Hazard Mitigation Assistance's (HMA) annual notice of Funding Opportunity (NOFO) webinars, which provide all of the detailed information to apply to a grant program before the grant application cycle opens. The HMA NOFO webinars will be provided later this summer and early fall. For general information about BRIC, visit www.fema.gov/bric.

#### **Additional Training Opportunities:**

EMI provides a wide range of training opportunities and upcoming training. .

EMI courses are free for local and state government employees. Learn more at the EMI website: <a href="http://training.fema.gov/emicourses/">http://training.fema.gov/emicourses/</a>

- E0172 Hazus for floodplain managers November 20-25, 2020
- E0194 Advanced Floodplain Management Concepts November 2-5, 2020
- E0273 Managing Floodplain development thru the NFIP August 10-13, 2020
- E0273 Managing Floodplain development thru the NFIP August 31-September 3, 2020
- E0278 NFIP/Community Rating System October 5-8, 2020
- E0279 Retrofitting Floodprone Residential Buildings August 17-20, 2020

#### **Webinars**

ASFPM – <a href="http://www.floods.org/n-calendar/webinars.asp">http://www.floods.org/n-calendar/webinars.asp</a>

Also...ASFPM is offering additional at home training. For information, see the link below:

Training page

#### **Conferences**

None upcoming.

Other training and CEC opportunities can be found on ASFPM's calendar: <a href="http://www.floods.org/n-calendar/calendar.asp?">http://www.floods.org/n-calendar/calendar.asp?</a>



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

#### Save the Date! 2021 IAFSM Conference

The 2021 Annual Conference will be March 10 & 11, 2021. It is currently scheduled for the Bloomington Normal Marriott and Conference Center, but the Board is considering virtual options if necessary.

#### Wanted: Newsletter Ideas and Articles

IAFSM members, this is YOUR newsletter! Email Jennifer Maercklein, editor, at <a href="mailto:jmaercklein@v3co.com">jmaercklein@v3co.com</a> 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. <a href="http://www.illinoisfloods.org/committees.html">http://www.illinoisfloods.org/committees.html</a>

#### **Borrow our Water Table**

IAFSM has five 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 currently keeps tables in Springfield, Champaign, Bartlett, Woodridge, and Swansea. Contact Sarah at <a href="IAFSM@illinoisfloods.org">IAFSM@illinoisfloods.org</a> to make arrangements.

#### **Next Board Meeting**

The next IAFSM Board Meeting will be held on Wednesday, September 9<sup>th</sup>. All members are welcome and encouraged to attend Board meetings. See you there!

#### **Jobmart**

Visit our Jobmart at <a href="http://www.illinoisfloods.org/jobmart.html">httml</a>. Jobmart is a free service to members of IAFSM. To post an open position, please sign into our website and complete the job listing form. If you have any questions please contact Sarah at <a href="IAFSM@illinoisfloods.org">IAFSM@illinoisfloods.org</a>.

#### 2020 CFM Exam Schedule

To view 2020 exam dates and register, visit <u>www.illinoisfloods.org/certification.html</u>.



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Illinois Association for Floodplain and Stormwater Management

#### Summer 2020 Newsletter

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 <a href="maintenant-newsletning-new

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