

Flooded Fox Brings Some Lessons

From Algonquin through the Dundee's and down into Elgin, July's flooding within the Fox River watershed reminds us of the challenges and perils of living near the river. Historically, flooding was seasonal and benefited the natural river system through nutrient distribution and scouring of sediment. Land areas that absorb flood conditions are referred to as floodplains and typically provide rich soils for agriculture. As populations expanded, encroaching on the floodplains, land use planners learned that building in these areas came with risks. Building walls was all too often the strategy for flood control. Contemporary thinking focuses on restoring floodplains with beaches (gradual slope) and deep-rooted native vegetation. Nature really does know best.



Elgin's Walton Island under water (photo thecaucusblog.com)

One issue is that we have significantly increased the Fox River flows with our own contributions. Aside from Elgin & Aurora, communities harvest their municipal water from underground. After residential and industrial use, these millions of gallons per day are flushed into the sanitary sewer system, treated at our municipal wastewater systems and discharged into the Fox River.

While floods may be natural, they are unwelcome in communities as they wreak havoc and cause financial losses, or worse – injuries and fatalities. In July, rain came in large amounts of quick bursts, and repeatedly. We have taken a watershed capable of absorbing such events, and made it vulnerable to flooding with roads, roof tops, and parking lots that limit retention and absorption, and then concentrate

the resulting flows. As we recover, we can turn this disaster into good through BMPs to reduce run-off.



West Dundee's Riverwalk flooded (photo chicagotribune.com)

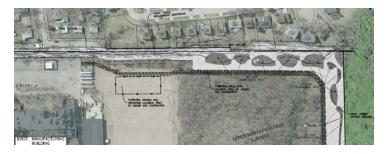
There are actions we can take individually and as a community to ameliorate some of these flood impacts. These include replacing turf grass, as it has limited capacity for rainwater infiltration, with native plants that also offer a stronger root system to reduce erosion; and increasing the use of permeable pavement, rain barrels, bioswales and rain gardens. From a community standpoint, there are several IEPA approved water management projects described in the JCFRWC Action Plan, yet to be implemented that would allow surface water to be managed more effectively in wetland areas and thereby slow runoff. Likely, the recent flooding event has highlighted areas where other potential projects should be undertaken to improve land use practices and better manage surface water. JCFRWC can work with interested communities to add new projects to the plan to seek IEPA approval.



Algonquin declares state of disaster (photo dailyherald.com)

kanedupageswcd.org/Jelkes/Docs/JelkesCreekPlan12-12.pdf

Floodplain and Stormwater Management Award



Carpenter Creek Realignment Plan

A prime example of investing to reduce flooding would be the Carpenter Creek Bank Stabilization Project, which was recently recognized with a 2017 Illinois Association of Floodplain and Stormwater Management (IAFSM) Sustainability Award. Through a \$628,000 IEPA grant, the Village of Carpentersville was able to remove over 40 properties from the floodplain. The project will also reduce sedimentation and nutrient loading, which will improve water quality. Job well done!

Watershed Signs in Carpentersville

You may have noticed Kane County Streams signs along major roadways at points of water crossings. The use of these signs originated from a Public Education task for the County's National Pollutant Discharge Elimination System (NPDES) stormwater program. The NPDES permit program was created by the EPA after the Clean Water Act was adopted to manage pollution going into the nation's waterways, and is administered by the IEPA for Illinois communities. The Kane County Streams sign initiative began in November 2003 when the Kane County Department of Environmental Management began making the signs to help identify streams within the County and offered them to municipalities to post. The design for the sign itself started in 2002 with 227 submissions from K-8 schools for the "Rivers Around Us" art contest. Jordan Lee, an 8th grader at Chicago Junior School, was selected as the contest winner.

The signs were initially placed at 42 intersections of county roads and waterways. The county then made 150 signs available to townships and municipalities to place, with four municipalities taking part. During 2015 and 2016, the county produced another 84 signs, which have been placed in Elgin Township, Plato Township, Batavia, the Virgil Ditch – Union Ditch sub-basin, and Carpentersville. The latter was based on an effort by JCFRWC to increase awareness about the local watershed and the importance of clean water.



Huntley Road watershed sign at the Fox River

With the assistance of Carpentersville, 25 signs have been installed with an additional 4 signs to be added at Washington Street and Spring Street once culvert work for Carpenter Creek is completed. In addition to the standard Kane County Streams sign, Carpentersville is adding an informational sign that alerts residents to "Protect Your Water" along with the Fox River Ecosystem Partnership (FREP) website for subwatersheds so that people can find more information on what a watershed is along with more specific details on the Jelke Creek – Fox River watershed (http://foxriverecosystem.org/subwatersheds.htm). The informational sign also includes the name of the creek or river at the roadway crossing.

Carpentersville is also working on placing a boundary sign when entering the watershed coming east along Huntley Road, which occurs at Randall Road. The sign will use the same artwork to draw synergy to water and the watershed. JCFRWC is sharing the sign initiative with other watersheds in hopes that others will create harmonious signage for ease of recognition by the public. Finally, as the coalition does not "own" the water, it is up to local municipalities, townships and counties to take this ownership. Will you join Carpentersville in educating your residents on the importance of water?



Grandview Road sign at Shaw Creek

Our Mission: Improve surface water and groundwater quality through outreach and implementation of best management practices Meetings: Schweitzer Environmental Center (SEC) 16N690 Sleepy Hollow Road, West Dundee, IL Email us to be added to mail list for meetings and other news Email: jcfrwc@gmail.com JCFRWC C/O FRIENDS OF THE FOX RIVER PO BOX 5634 ELGIN IL 60121