

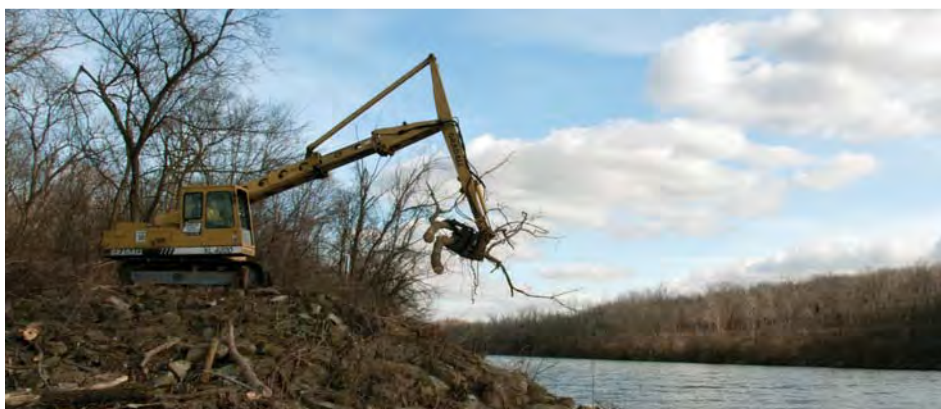
Small Streams Big Accomplishments

The Newsletter of the MWRD's Small Streams Maintenance Program (SSMP) Fall 2012



Rain or shine, SSMP crews hard at work

Chicago and the surrounding Cook County communities endured one of the hottest summers on record in 2012. At the beginning of August, the average summer temperature was 77.8 degrees and the highest average ever observed. The year-to-date has been the hottest on record for the United States. The extreme and constant heat was intensified by the lack of rain, resulting in drought conditions throughout the Midwest. The Metropolitan Water Reclamation District of Greater Chicago (MWRD) Small Streams Maintenance Program (SSMP) crews were challenged by working in the heat but took advantage of dry conditions to keep the area waterways clean and ready for stormwater flows.



Stony Creek debris removal & hydro mulching

The MWRD has completed numerous major small streams maintenance projects in 2012, among the largest was along Stony Creek in Palos Hills. At top, a worker sprays mulch after the area was hand-seeded. At bottom, large debris was removed near the edge of the creek and the Cal-Sag Channel. The project resulted in the removal of 2,690 cubic yards of debris.

Stony Creek Before and After



Before

Stony Creek is seen near the intersection of 111th Street and 86th Avenue in Palos Hills prior to the SSMP crews' work. The creek is surrounded by homes and businesses and is a critical drainage feature that flows directly into the Cal-Sag Channel.



After

SSMP crews began clearing in February and were finished by March. After the area was cleared, it was seeded with native slope stabilization grasses before being sprayed with hydro mulch, a wet mixture of organic materials, to ensure proper growing conditions.

How you can help prevent flooding

- Plant native, deep root vegetation adjacent to creeks and waterways
- Remove buckthorn and honey suckle and any other invasive or non-native woody vegetation
- Keep flood plain areas free of floatable debris
- Contact the MWRD if you see erosion near critical infrastructure
- Do not dump grass clippings on the banks or near street drains
- Do not fertilize close to the tops of the banks (runoff could enter stream and cause excessive plant growth, known as “blooms”)
- Prevent turf grass with shallow roots (such as Kentucky bluegrass) from growing close to stream banks

How to be safe in flooded areas

- Do not walk or drive through flooded areas
- Stay away from power lines and electrical wires
- If your home begins to flood, turn off the electricity and be alert of gas leaks and contact your local utility company
- Do not use a generator or other gasoline powered machine indoors or in the garage
- Watch your step when walking through any flooded rooms
- Be prepared - Have a plan to safely deal with flooding and be prepared to evacuate your home in the case of severe flooding

What is a Floodplain?

Intense rain storms can cause flooding in almost any area, but some areas are more likely than others to flood due to the characteristics of the landscape. An area of land that is prone to flooding during and after heavy rain is referred to as a floodplain.

Floodplains are technically defined by the Federal Emergency Management Agency as any area that floods as a result of a 100 year storm. What is a 100 year storm? It is *not* a storm that occurs only once every 100 years, rather, it is a storm that has a 1% chance of occurring in a given year.

This means that Cook County *can* and *does* experience multiple 100 year storms in a single year.

Because of our flat landscape and meandering streams, many communities in Cook County are located partially or entirely within floodplains. Paved surfaces and buildings in developed areas block the ground from absorbing water and redirect stormwater into stream channels. Expanses of concrete, buildings and impervious surfaces increase the volume and velocity of water flowing through the waterways and make it necessary to constantly moni-

tor and maintain streambanks and floodplains.

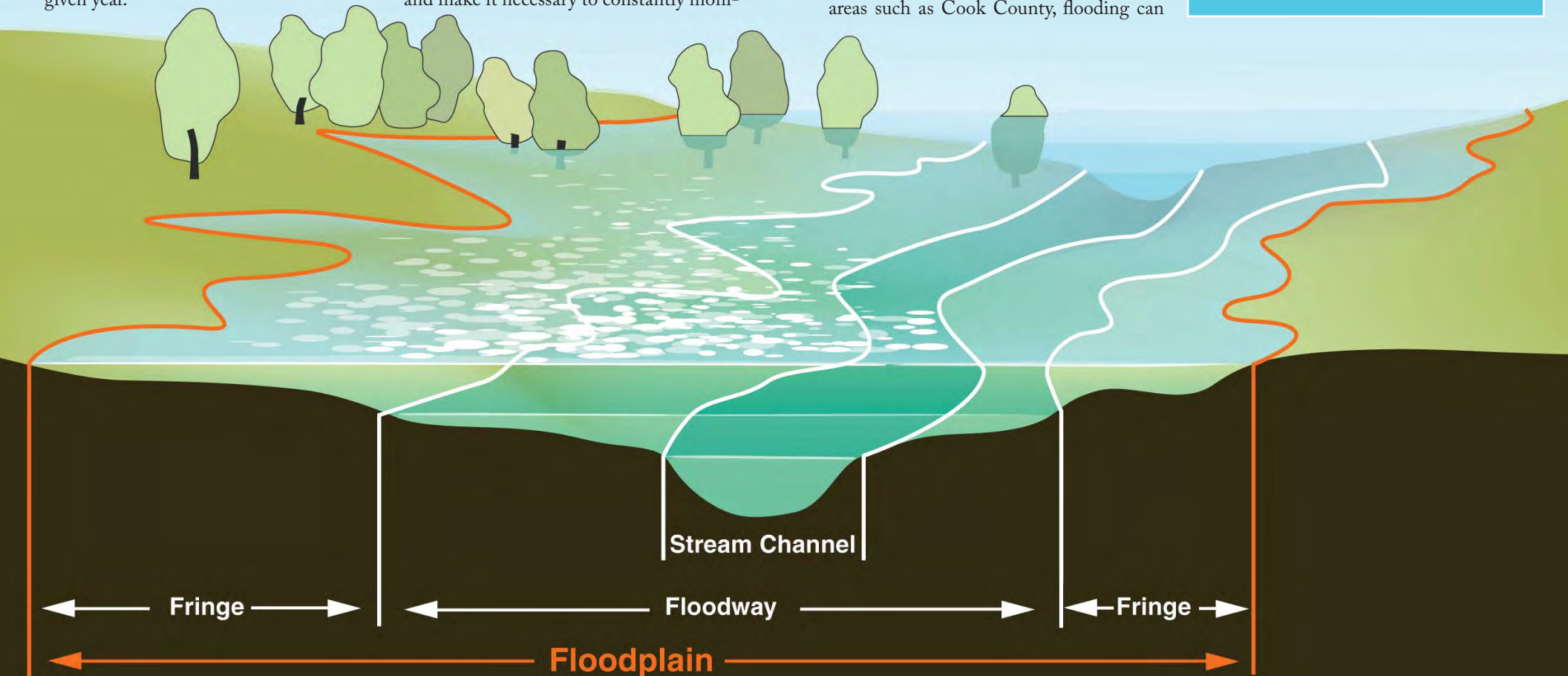
Floodplains are made up of fringe areas, floodways and the stream channel, as illustrated below. As you can see in the illustration, normal water level in the stream channel is safely contained and flows along a well-defined path. As water level rises in the waterway it spills over its edges and pools in the floodway and fringe areas.

In a natural landscape, flooding provides ecological benefits such as topsoil nutrient replenishment; but in densely populated areas such as Cook County, flooding can

damage property and pose safety risks.

The MWRD SSMP team removes dead and dying trees and debris throughout floodplain areas to make sure floodwaters can drain away easily. They work to keep stream channels clear and freely flowing, which can prevent water from overflowing into floodplains.

If you notice a blockage or debris in a waterway, call SSMP manager Brian Levy at 708.588.3171.



Mill Creek Before and After



Before

The log jam pictured above was discovered in Mill Creek in McClaughry Springs Woods, near Palos Park in April 2011. SSMP crews had to wait for ideal conditions before entering the preserve to remove the debris. Heavy machinery can compact soil around the roots of plants and disturb the plant life unless the ground is completely dry or frozen for several days. The log jam appears to have started as a small blockage and accumulated debris, and later a smaller blockage upstream broke up and collected at the main logjam. The SSMP crews spent one day making a trail to the creek and one day removing 120 cubic yards of debris. Below: MWRD senior civil engineer Brian Levy inspected the site in March.



After

Biosolids Field Day

In June, the MWRD hosted its annual Biosolids Field Day at the Mid-Iron Golf Club in Lemont. MWRD Commissioner Frank Avila presented the 2012 Chicago Metro Biosolids User Awards to honor an organization and an individual for their efforts in the beneficial reuse of biosolids. The MWRD produces approximately 165 thousand dry tons of nutrient-rich biosolids every year and distributes them at no cost to area farmers, park districts, property developers and landscape professionals for use as a fertilizer replacement for parks, recreation areas, feed crops and turf building.

In the organization category, Bob Johnson, Superintendent of Buildings and Grounds for the Frankfort Park District, accepted the award on behalf of the Park District. "The Frankfort Park District has been very active in using biosolids to maintain

over 100 acres of parks since 2007, plus they share their results and information with other park districts," said Commissioner Avila.

In the individual user category, Commissioner Avila presented the award to Jim Walsh, owner and operator of Sportsfields, Inc. Walsh has used MWRD biosolids since 1990 on behalf of various clients. "Sportsfields Inc. has been using biosolids on most of its field renovation projects since the late 1990s and has been a continuous advocate and promoter of the biosolids program," said Commissioner Avila. "Many new users have been introduced to the program through Jim."

Additional information about the MWRD's nationally acclaimed biosolids program can be found at www.mwr.org.



MWRD Commissioner Frank Avila, center, presented the 2012 Biosolids Beneficial Reuse Awards to Bob Johnson, Superintendent of Buildings and Grounds for the Frankfort Park District, at left, and James Walsh, owner of Sportsfields, Inc.

2012 *Downstream Milestones*

Approximately **12,910 cubic yards** of debris have been removed from area small streams so far in 2012.

Thanks to the many cooperating municipalities who provided assistance with the removal of river and stream debris. Here is the breakdown by watershed:

Little Calumet

3,000 cubic yards

Cal-Sag

5,200 cubic yards

Lower Des Plaines

3,100 cubic yards

North Branch of the Chicago River

1,300 cubic yards

Poplar Creek

140 cubic yards

Upper Salt Creek

170 cubic yards

Report small stream blockages

Call Brian Levy at 708.588.3171 or go to www.mwrd.org

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Mission of the Small Streams Maintenance Program

To reduce flooding in urbanized areas through immediate and relatively simple remedies.



Small Streams, Big Accomplishments is published biannually by MWRD Office of Public Affairs as a service to the communities within its Stormwater Management service area.

Contact us:
Public Affairs: 312.751.6633
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