A Drop of News

The Maple City Stormwater Toolbox

Treating Stormwater Leads to Cleaner Water



The goal of the Goshen Stormwater Program is clean water for everyone and everything.

Over the decades, since the passage of the Clean Water Act in 1972, our nation has come a long way toward reaching the goal of fishable and swimmable waterways and waterbodies. However, even though our nation has come a long way in reducing the release of pollutants directly from pipes (point-source pollution) pollutants continue to be washed into waterways via stormwater runoff. Stormwater runoff is the only growing source of water pollution flowing into our nation's waters. The reason for this is that many storm sewers drain directly to a waterway without being treated, resulting in pollutants being washed downstream to impact other communities.

The City of Goshen strives to reduce the impacts of stormwater pollution by installing treatment devices into the storm sewer system called Stormwater Treatment Units (STUs). These STUs help to capture pollutants like trash, sediment, oil, grass clippings and leaves, bacteria, etc., which can then be removed and disposed of at a landfill.

Over the past month, the Stormwater Department and the Water & Sewer Department have inspected and cleaned out



Materials captured by the STUs are dumped at the Wastewater Treatment Plant. (Inset: Debris left after a Vactor truck has emptied.)



Quinn Grass of the Water & Sewer Department removes a lid from a STU. (Inset: Looking down into a structure as the Vactor truck runs.)

14 public Stormwater Treatment Units that are owned and operated by the City of Goshen. The debris in these units consists of trash, sediment, and street sludge that get trapped in the STU due to their design elements. Their design allows for the water to swirl as it enters the unit, intersecting baffles in the structure holding up trash and allowing for debris to drop out to the bottom. The cleaner water then exits near the top of the structure into the stormwater conveyance system. The debris left in the unit is collected by the city's Vactor truck, using the powerful suction these trucks provide, and is then taken to the Wastewater Treatment Plant. The debris is dumped into dumpsters (in the picture to the left) where the water can drain away and when dry the debris is taken to the landfill for disposal.

Let's do the numbers: One full truck of this material is 15 cubic yards (yds^3). Last year the city removed 18 full truck loads (270yds^3), this year 16 full loads (240yds^3) were removed for a total of 34 loads equal to 510 cubic yards. This is equivalent to 138 tons or 276,000 pounds or 13,770 cubic feet or 103,007 liquid gallons or 16% of an Olympic-sized swimming pool of material that has not entered into our waterways.



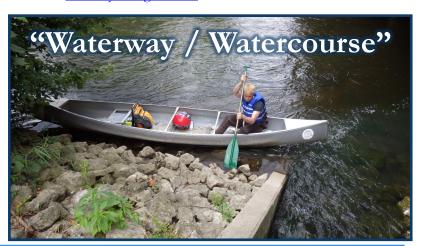
"Waterway / Watercourse"

"From Old Saxon water, Old Frisian wetir, Old High
German wazzar, German Wasser

In English, waterway refers to a navigable water route. While watercourse is a generic, often formal term for any flowing water feature. Used in regulations as a catch all."

Why are there so many words for waterways?

This month's word is "Waterway / Watercourse" as we explore the words used to describe waterways based on size and location. Credit for this idea goes to Graham Waugh, Water Resources Engineer at CBCL Limited (www.instagram.com/waterresourcesguy), and additional etymology information from www.etymologeek.com.



The Elkhart River at the Indiana Avenue Bridge

World Rivers Day

"World Rivers Day is celebrated on the fourth Sunday of September and is a celebration of the world's waterways. It highlights the many values of our rivers, strives to increase public awareness, and encourages the improved stewardship of all rivers around the world. Rivers in virtually every country face an array of threats, and only through our active involvement can we ensure their health in the years ahead."

The Elkhart River and Rock Run Creek are two of the many waterways that flow through Goshen and their health reflects the health of our community. (www.worldriversday.com)

"Rivers are the arteries of our planet; they are lifelines in the truest sense." ~ Mark Angelo

Report a Pollutant

Stormwater pollutants include anything other than rain that could flow or be washed into a storm drain. If you see a pollutant entering a storm drain, please call 574-534-2201, send an email to stormwater@goshencity.com, or submit a Stormwater Report through the City's "Report an Issue" button on the City of Goshen website, www.goshenindiana.org.

Public Works & Utilities Department of Stormwater 204 E. Jefferson Street Goshen, Indiana 46528 574-534-2201 bit.ly/goshen-stormwater

