

A Drop of News

The Maple City Stormwater Toolbox

October 2021

Wastewater Plant, Stormwater, and Water Quality



In Goshen, like in many communities, wastewater and stormwater are linked through combined sewer systems. While many of our storm drains empty directly to waterways, some older areas of Goshen still have drains connected to sanitary sewer lines, called combined sewers, that take a mixture of sanitary sewage and stormwater to the Wastewater Treatment Plant (WWTP).

The WWTP thus treats millions of gallons of stormwater during rain events. Sounds great right!? Unfortunately, there is a major downside when we get heavy rains—the amount of water flowing through the sanitary system can overwhelm the treatment capacity of the plant which used to lead to combined sewer overflows (CSOs) that released both sewage and stormwater directly to the river with no treatment—causing spikes in *E. coli* and other hazardous impairments.



WWDF along the Elkhart River. The holding area screens and settles pollutants.

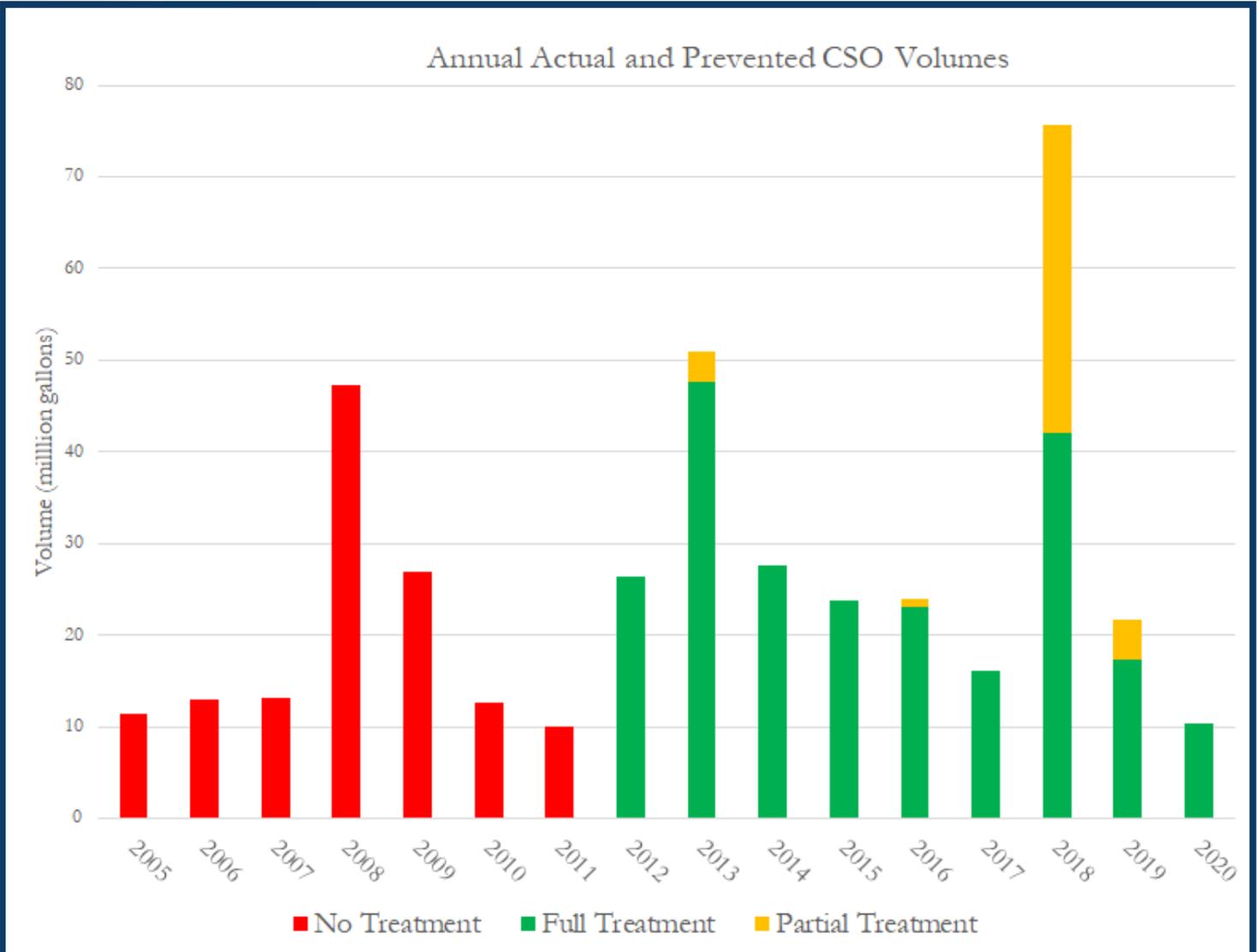
Goshen's Wet Weather Detention Facility (WWDF) opened in 2011 and was able to immediately and drastically reduce the number of CSO events in a year by temporarily holding large volumes during rain events until it can be treated. Other overflow reduction projects have included separating stormwater pipes from sanitary sewer lines to reduce the volume of water reaching the WWTP in the first place. Today, new developments always separate storm from wastewater and updated design standards place a greater emphasis on holding stormwater in place. See page two for the City's progress on reducing CSO overflows.

Stormwater is one of the only growing sources of water pollution in the United States

This progress means our water is cleaner and healthier than at any other time during the past century, but it also means stormwater pollution prevention is as, or more, important than ever. Chemicals and other pollutants dumped down a storm drain no longer make their way to a treatment facility, but are carried directly to our waterways—often without any form of treatment. Stormwater green infrastructure options that utilize vegetation to filter stormwater pollutants offers a promising newer frontier in further improving our water resources.



Wastewater and Stormwater Continued...



The number and volume of CSOs has been drastically reduced in Goshen since the construction of the WWDF in 2011. This chart shows the millions of gallons of combined sewage coming to the WWTP that it could not immediately handle on its own. The red bars show the volume of CSOs between 2005 and 2011 that were released, untreated, directly to the Elkhart River. The green bars represent the volume of CSOs that were captured by the WWDF and fully treated by the WWTP. The yellow shows the volume of CSOs that the WWDF partially treated during extreme rain events, like the February 2018 flood. Between 2012 and 2020, the WWDF helped treat about 234 million gallons of combined sewage that otherwise would have ended up in the Elkhart untreated.

Next month, find out how our recent City Department highlights all come together as we look at the new plant improvement projects going on at the WWTP.



October Pollutant Challenge

Will you help keep trash out of our waterways?

Why is trash a problem?

The trash humans generate daily can cause major problems (e.g., physical, chemical, and biological) when it is not disposed of correctly, especially for waterways like the Elkhart River. Trash can damage important aquatic habitats by reducing light and oxygen levels, acting as a sponge for toxic chemicals and/or releasing chemicals into the water as products degrade, entangling aquatic animals, and causing birds and aquatic animals to starve from the accumulation of material mistaken for food. Finally, trash can have an impact on human health and enjoyment of a waterway. All of these issues occur together and show why trash is a problem that must be addressed whether it comes from residential, commercial, or industrial sources. For more information

visit bit.ly/h2oTRASH.



Trash floating amongst duckweed in a roadside ditch.

What can I do about it?

As the leaves fall and before the first snow is an excellent time to focus on trash as a stormwater pollutant. Some things you can do:

- Place trash in bags and put them in covered dumpsters or trash cans
- Don't overfill trash cans
- Pick up littered trash you see and dispose of it correctly
- Try "Plogging" the next time you go for a jog
- Talk with your family and friends about why trash is a water quality issue

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.

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574-534-2201

bit.ly/goshen-stormwater

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