



City of Goshen

STORMWATER TOOLBOX

Public Works & Utilities
Department of Stormwater

204 E. Jefferson Street

Goshen, Indiana 46528

574-534-2201

bit.ly/goshen-stormwater

Director of Public Works:

Dustin Sailor

Stormwater Coordinator:

Jason Kauffman— 537-3832



Sediment pollution in Horn Ditch.

grow. Thus, action was taken to minimize the impact of stormwater pollution by designating urban areas into two categories: Phase I and Phase II MS4s. Phase I MS4 communities were identified in 1990 because they had a population of 100,000 or more and only Indianapolis met this threshold. In 1999, communities with a population density threshold between 10,000 and 100,000 were identified as Phase II. There are currently 183 Phase II MS4 communities in Indiana. The MS4 communities identified throughout the nation by 2009, are highlighted in the map to the right.

For more information on what the City of Goshen does to reduce the impact of stormwater runoff on our local waterways visit bit.ly/goshen-stormwater.

What is an MS4 and Why Does it Matter?

Happy New Year from the Goshen Stormwater Department and welcome to all the new City employees. Let's begin 2019 with a stormwater refresher by explaining why the City of Goshen is considered a Municipal Separate Storm Sewer System, or MS4. An MS4 is defined as a conveyance or system of conveyances that is:

- owned by a state, city, town, village, or other public entity that discharges to waters of the U.S., and
- designed or used to collect or convey stormwater (e.g., storm drains, curbs and gutters, pipes, and ditches).

The term MS4 does not solely refer to municipally-owned storm sewer systems but rather is a term with a much broader application that can include state departments of transportation, universities, local sewer districts, hospitals, military bases, and prisons.

The identification of communities as MS4s is to help reduce water pollution in our nation's waterways through the National Pollutant Discharge Elimination System program, which is part of the Clean Water Act. The Clean Water Act helped reduce the impact of point-source pollution, but non-point source pollution, like stormwater runoff, continued to



National Map of Regulated MS4s - credit: US EPA NPDES



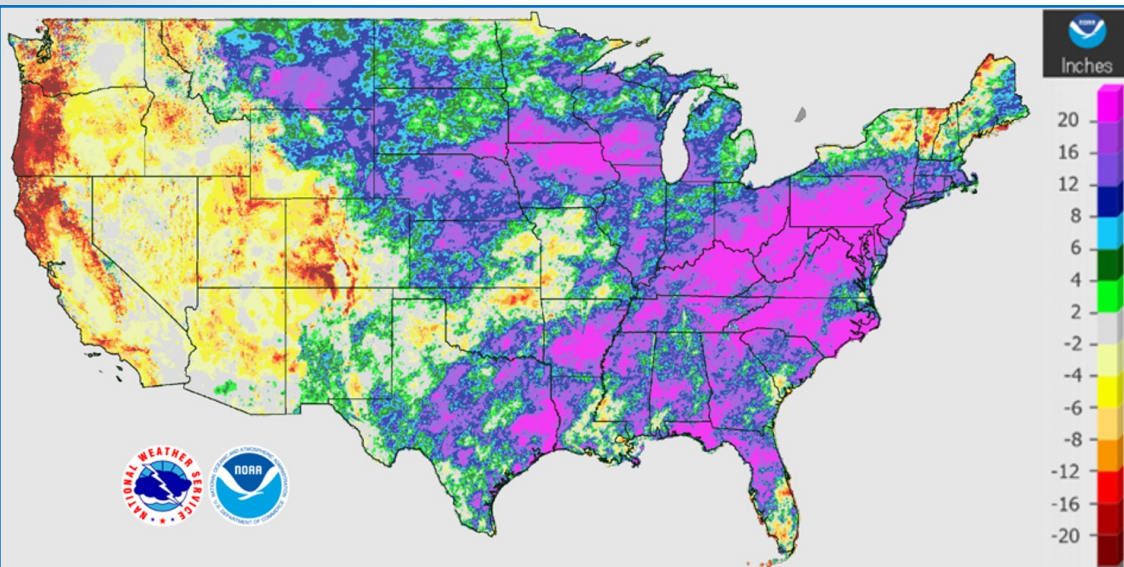
A DROP OF NEWS

Your Stormwater Newsletter

Precipitation in the Year 2018

The following information comes from a January 3, 2019, blog post written by Suzie Housley of StormSensor (bit.ly/stormsensor): 2018 was one of the wettest years on record, particularly in the Eastern and Midwestern U.S., where over 25 cities set new records for rainfall. Meteorologists at weather.com tracked **FIVE** 1-in-1000-year rain events in 2018. However, it's important to note that these large events were not the only contributing factors to record-setting annual rain totals. For example, Wilmington, NC, was affected by Hurricane Florence, but even excluding the totals from that event, the city still set precipitation records in 2018. This map from NOAA shows the national deviation from average precipitation in 2018; as you can see, most regions east of the Rocky Mountains had a very wet year. Goshen and surrounding areas were 12-16 inches above normal.

1-in-1000-year rain event means it has a 0.001% chance of happening each year.

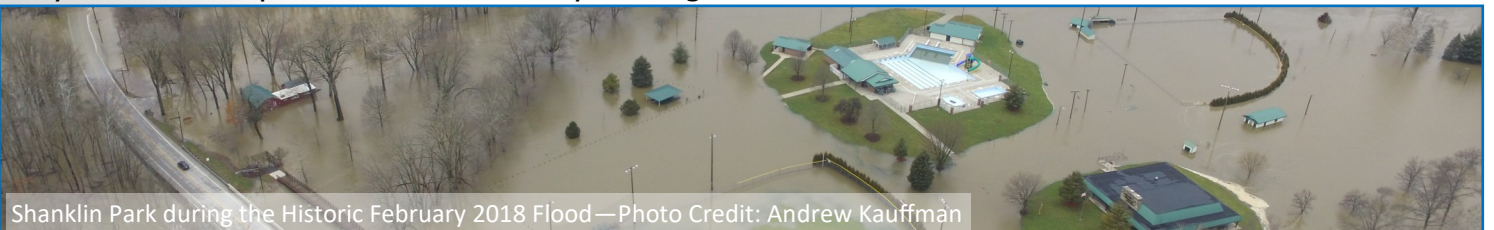


Map Credit: NOAA - <https://water.weather.gov/precip/>

Once all that rain hits the ground it becomes...stormwater! So, not surprisingly, 2018 was also a year of record flooding. Extreme rain events led to flooding in many regions east of the Rocky Mountains, including the **Michiana area**, Louisville, KY, the Carolina's, and the Mid-Atlantic states. Experts blame these historic floods not only on the rain but also on increased impervious surfaces (like streets,

roofs, sidewalks, etc.) in urban areas, which increased the amount of flooding since the rain had less area to soak into. These floodwaters picked up many different kinds of pollutants and deposited them in the waterways of those communities leading to a negative impact on water quality.

We will never know how much rain will fall on our communities throughout the year, so it is best to be prepared. Make sure to dispose of trash, oil, animal waste, landscaping waste, etc. responsibly so that they do not end up in our local waterways during the next rain event.



Shanklin Park during the Historic February 2018 Flood — Photo Credit: Andrew Kauffman

If you see an illicit discharge (anything other than rain going down the storm drain) please report it by calling or emailing: jasonkauffman@goshencity.com.