

*STUDENT'S GUIDE TO UNDERSTANDING  
COMBINED SEWER OVERFLOWS*

# **Combined Sewage Overflows**

*What does this mean to me?*





Everyone likes to be near the water on nice days. Have you ever gone to the river bank for a picnic, picked up some rocks and skipped them across the water? Have you ever gone fishing along White River or Buck Creek? If it was really hot out, you maybe even went wading in the water. It probably felt good and it was fun watching the little minnows swim around your feet. Some of you may have even been canoeing or rafting with your parents and had a great time.



Fishing, skipping rocks, even wading in the river can be fun. But you have to remember that even though the water looks clean, it can be dirty and could make you sick, if you aren't careful.

You never ever want to go swimming in the river or a creek. The only place you ever want to swim is in a "designated" swimming area. This means only where there is a life guard or where your parents say it is safe to do so. Let's leave swimming in the river to the ducks, geese and fish.



Let's talk about why you want to be careful near White River or the creeks around Muncie.

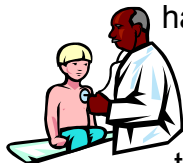
One big reason is that you could drown if you go in the water with no life guard or without an adult.

You never want to go around a river or creek covered in ice without an adult around (even if you are tempted to go skating). It just isn't safe. You don't know how thick the ice is or if there are any cracks you can't see. Icy cold water is very dangerous.

But, what we want to talk about is protecting your health.



Living in the water are bacteria and viruses. These are little bugs that you need a microscope to see. Some of the bacteria are okay and very helpful to fish and plants.



But, some of the bacteria and viruses can be harmful to you. One type of bad bacteria is called "E-coli" and these guys can make you very sick. They are found in wastewater and they come from warm-blooded animals.

Let's find out why White River and the creeks around Muncie have these bacteria in them.

Many years ago, when Muncie was first built, whenever it rained the streets and homes would be flooded. There was no where for the rain water to go. The city needed a way to take the water away from the homes and streets.



So, Muncie built a system of pipes under ground to get rid of the rain water. (Remember back then people still used outhouses and didn't have in-door running water). This system of pipes carried the rain water from the streets and homes straight to the river. So, they called these pipes "storm water sewers."




You can see where sewers are by looking for the manhole covers in the street. Don't ever take off a manhole lid or look inside if one is off—you could fall in.

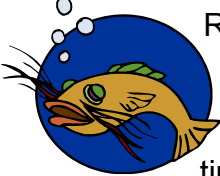


Later people started getting indoor plumbing and they needed a way to get rid of the human waste (from toilets, washing dishes, washing machines, baths and other things) this was called “raw sewage”. Since the pipes were already there to carry the rain water away, they just hooked their sewage pipes to the storm water sewers. Now these pipes were called “combined sewers”, because wastewater from homes is combined or mixed with the storm water. This caused the river to become polluted from the wastewater in the pipes. Still over time, nature was able to take care of the small amount of pollution caused by the homes.






Then industries and businesses moved to Muncie and they needed a way to get rid of their wastes. Since the pipes were already in the ground, they connected to them too. This was too much for nature to clean properly and the river became more polluted.



Raw sewage in the rivers and creeks steals oxygen from the water, making it very difficult for fish to breathe and sometimes will even kill the fish.



Finally, the people in Muncie decided to build a place that all the pipes carrying the “combined sewage” could go to instead of the river. So they connected all the old pipes with new pipes and sent the sewage to the Muncie Water Pollution Control Facility to have the raw sewage “cleaned” before it is returned to White River.

When the plant was first built it was small and could only take the regular daily sewage. Muncie knew that if it rained or snow melted and this ran into the streets, the flow would be too much for the treatment plant to handle, so they left some of the pipes that ran to the river in place.

So, during dry weather all of the wastewater flows to the treatment plant. But, when it rains or snow melts, these combined sewers are overloaded because too much water goes down them at one time. When this happens, instead of backing the raw sewage into your homes, it overflows into the river. This is called a “combined sewage overflow.” These combined sewage overflow outlets are located along the river banks, mainly in the old part of Muncie (around the downtown and historic areas.)



Any new sewers that are built have to have two pipes—one for storm water that will go to the river—and one for wastewater that will go to the treatment plant.

We would like to invite your class to tour the Muncie Water Pollution Control Facility to see how the wastewater from Muncie is cleaned before it is returned to White River.

If you can't come to the plant or you would like to learn more about the Muncie Water Pollution Control Facility you can tour the plant on the internet at:

**[www.munciesanitary.org](http://www.munciesanitary.org)**

There is also a student guide there that you can read and print out to help you understand wastewater treatment.

Let's talk about you playing near or in White River or any of the creeks around Muncie.



After playing in the river you should always wash your hand and face with soap before eating or touching your face, your toys or other people. You want to be careful and if you fall in, you should tell your parents as soon as possible so you can get a bath.



You should never play in or around White River after a rain. Some of the combined sewers could have flowed into the river, which we now know means raw sewage could be in the river.



Does this mean that all water is unsafe? No, but you need to be careful around all water where other people or animals gather. Even in a public pool, if you have to go to the bathroom, get out of the pool, don't go in the water. Doing that could make you or other children sick.

The Muncie Sanitary District is trying to make White River a cleaner river by taking more of the combined sewage to the treatment plant and they are looking at other ways to stop the combined sewage overflows.

In the mean time you need to look for signs along the river that look like this one:

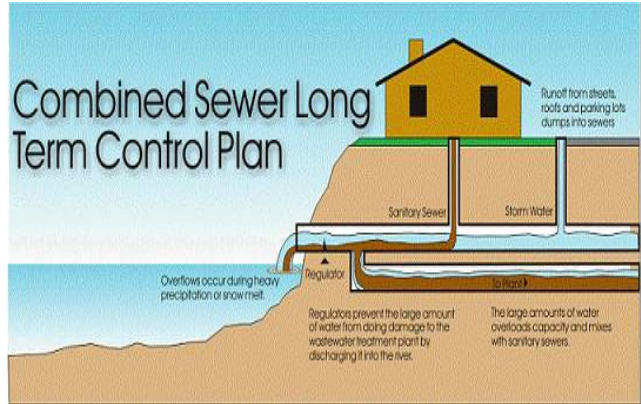


When you see one of these signs, make sure you tell your mom or dad that you know what it means. It means that after a rain or when snow melts the river could become polluted because of raw sewage going into it and that is never a safe time to go into the river, no matter what.

If you see a concrete structure like this or a pipe going to the river, don't play around it. It could be a combined sewage overflow or it could be a storm water pipe. In either case if it starts to rain, or for any other reason, water could come out quickly without warning.



If you ever see water flowing out of these pipes when it is dry outside, tell an adult to call the phone number on the sign and tell the person on the phone the number it gives for that combined sewer overflow.



More information about Combined Sewage Overflow and the Muncie Sanitary District's Long Term Control Plan is available on Muncie Sanitary District's web site at: [munciesanitary.com](http://munciesanitary.com) (.org or .net)



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