

APRIL SHOWERS BRING MAY FLOWERS ... BUT WHAT DO MAY FLOWERS BRING?

by Ken Leinbach, Executive Director and Mike Larson, Executive Assistant

Why Pilgrims, of course! (Remember this from second grade? Still makes me chuckle!)

Unfortunately, if big enough, April showers also may bring us something far less pleasant — sewerage overflows into our beautiful Lake Michigan. Ironically, this same body of water we so frequently contaminate is also where most of our drinking water comes from. We'd like to empower you in this article to help alleviate this problem with what we are calling "The 100 Gallon Challenge"...but first we must understand the problem.

Take a single drop of water. Out in Lake Michigan our drop of water bravely begins its cyclical journey when it is sucked into an intake pipe about a mile off the coast of Milwaukee. It then goes through an energy exhaustive cleaning and distribution process where it is treated with ozone, coagulated, mixed, settled, filtered, chlorinated, fluorinated, stored and then mixed with phosphorous and ammonia. Next it flows to one of three pumping stations scattered around Milwaukee and then finally travels over four miles to my home. Then what do I do with this precious commodity? I may drink or wash with it, but odds are higher that I'll use it to flush my toilet. Almost 30% of this "valuable" resource goes right into the back of my toilet waiting for my next flush. Yes, it is important that our drinking water be purified before we use it, but to use this highly processed water in our toilets or even to water our lawns and gardens seems pretty wasteful — but that is how our system work (unless you model the Center — one of the few building in the state that uses rain water to flush and clean).

Back to our water drop...we just flushed it down the toilet or poured it down the drain, so what happens next? If all goes well, it travels through the sewers to our wastewater treatment plant where it goes through another exhaustive and expensive, yet very effective treatment process before it finally makes its way back to the lake. However, during large storm events the system gets overwhelmed with massive quantities of rain water in our system, either intentionally in areas of the city served by a combined sewer system, or unintentionally through leakage of aging pipes. When this happens we have no choice but to dump untreated water back into the lake (the alternative is sewer backups in our homes). Our Deep Tunnel system, a huge cavern we dug under Milwaukee, has helped to mitigate this problem by storing excess rainwater for later processing. We used to dump nine billion gallons of untreated sewer water into the lake each year. Now, with the Deep Tunnel, we are down to one billion gallons every year. That's great progress, but in my mind that's one billion gallons too many.

Whether you want to admit it or not, you and I are part of this problem. Sure the Milwaukee Metropolitan Sewerage District (MMSD) can add more Deep Tunnels, repair outdated sewer lines and restore wetlands to absorb excess rain water (and they are doing all of this), but what about us? Is there anything we can we do to help? The answer is yes...we can and we should!

We would like to propose a simple and elegant way that you can join us in doing our part to protect Lake Michigan: we call it the 100 Gallon Challenge. Think of it as a 40th anniversary Earth Day pledge. The challenge is for every household which reads this newsletter to reduce the amount of water that goes into the Deep Tunnel during a heavy storm session by 100 gallons. Here's how:

First, purchase a rain barrel and connect it to a downspout on your house. Rain barrels are distributed by the MMSD and can be purchased at the Urban Ecology Center or another location for \$45. A properly utilized rain barrel can save 55 gallons from going into the sewer every time it rains. Second, pay attention to the weather. If rain is in the forecast, be sure your barrel is emptied (you can use the excess water to wash your car or water your garden in between rains). Finally, if it is raining or rain is in the immediate forecast, wait to do the laundry or dishes until after the rain event is over (this website might help: <http://v3.mmsd.com/StormUpdate.aspx>). This simple step can save another 55 gallons of water per household from going into the sewer. Taking short showers instead of baths or flushing the toilet less during a storm can save an additional 25 gallons. We did it, and it was so simple...over 100 gallons saved!

Think about this during the rains of April. If everyone in Milwaukee got into this habit of responsible behavior, we could be well on our way to a healthier lake. If businesses follow suit and the MMSD keeps expanding its water storing infrastructure, we might just lick this problem. Without your help, however, it will never work.

Eco tip: Have you ever considered line drying your clothes? People who harness the power of the sun to dry their clothes naturally wait for a sunny day to wash their clothes. This helps mitigate the water problem without even thinking about it and it saves energy too!