# STORMWATER UTILITY

The Stormwater Utility was created to provide for the management of surface water run-off in the City of Appleton. It exists to limit flooding and protect water quality.

## Q: Why are there so many ponds?

A: Pavement and buildings cause more rain and snow melt to run off the land surface rather than soak into the ground. Cities and private developers are required by Federal and State laws to control this runoff for flood control and water quality. Stormwater ponds are currently the most cost effective way to manage stormwater.

Wet ponds have a permanent pool of water typically five feet deep. They temporarily hold water and release it slowly allowing sediment and other pollutants to settle to the bottom of the pond instead of being carried into lakes and streams. During heavy rains, runoff enters ponds faster than it is released, causing ponds to fill with water temporarily. Ponds usually drain down after a day or two.

### Q: Why aren't ponds fenced?

A: City ordinance does not require fences around stormwater ponds. It is not a common practice to install fences around storm water ponds because fences can cause as many or more problems than the absence of a fence. If someone is intent on reaching a pond, a fence is not a good deterrent when it can't be monitored. In such cases, a fence can actually attract attention and unwanted activity. In fact, if a rescue from a pond were needed, fences could become unwanted barriers. Also, fences are sometimes viewed as unsightly and can cause additional maintenance requirements/costs. Private pond owners and their insurance companies may decide to fence their ponds. In addition, there is typically an 8 to 10 foot wide safety shelf, with only about 9 to 12 inches of water at normal levels, incorporated into the ponds to reduce the risk of falling into the permanent pool.

# Q: Can I fish or swim in a storm water pond?

A: City ordinance prohibits swimming and limits fishing to "catch and release" in stormwater ponds. It may also not be advisable to use a city pond for other recreational activities, such as ice skating. These ponds are intended to capture pollutants from storm water. You should avoid any exposure to even low levels of pollution that may or may not be obvious. Exposure can either be direct, like skin contact, or indirect, like fish consumption. Because water flows are erratic and water levels fluctuate, ice formation on these ponds should not be assumed to be safe.

# Q: Why is our pond green and scummy-looking?

A: What you see may be algae (although some floating plants, like duckweed, can look like algae from a distance). Excess nutrients, like Phosphorous, in the water combined with warm, sunny weather, will cause algae and other aquatic plants to grow very rapidly. This can often lead to excessive algal growth and is commonly referred to as an algae bloom. A certain amount of algae is expected at ponds, but if it gets very thick, management may be necessary. This typically involves getting a DNR permit and applying a chemical to the water. Because of the cost and the potential for negative environmental impacts, this type of maintenance tends to be used sparingly.

# Q: Can the weeds along the shore be removed?

A: Much of what some people consider to be weeds are actually beneficial native plants. It is City policy to establish and maintain native shoreline plants. The proper plants will prevent shoreline soil erosion and help to prevent flooding by slowing down the flow of stormwater run-off during major rain events. Aquatic plants pump oxygen into the water and create habitat by providing cover and nurseries for fish and other organisms. Vegetated shorelines also improve the water quality by filtering polluted runoff and trapping sediments. Deep rooted native plants help infiltrate runoff, aiding with groundwater recharge, and providing habitat for small animals.

#### Q: Can wet detention ponds become prone to mosquito breeding?

A: A wet detention pond is designed to fill up with sediment and other pollutants. When the permanent pool becomes too shallow, generally less than 3-feet, the property owner or other responsible party (sometimes the municipality) needs to dredge the sediment that has accumulated in the pond. If a wet detention pond becomes noticeably shallow, then dredging should be done as the pond can then become mosquito-breeding habitat.

Wet detention ponds are typically designed to have a 3 to 5-foot deep pool of water, which is not the preferred breeding area for the type of mosquitoes that carry West Nile Virus (referred to as container mosquitoes).

## Q: Are there alternative designs or treatments for stormwater instead of relying on wet detention ponds?

A: A wet detention pond can serve a large area and can provide both water quality and flood control. Other practices that provide water quality, but often little flood control, include bio filters and underground concrete structures.

## Q: What kind of maintenance do the ponds require?

A: Trash collection, tree and brush removal, erosion repair, dredging, native/non-native plant maintenance (mostly cutting, controlled burning, and herbiciding), and muskrat damage repair. Trash is scheduled to be collected after the snow melts in the spring and then again in the fall.

#### Q: When will my street be cleaned?

A: Street sweeping schedules vary throughout the city depending on street usages and whether the water runoff will be directly returned to the local waterways or if it will be sent to a stormwater pond. Areas that are contributory to a stormwater pond will be swept every 6 weeks while those that are directly returned to lakes or streams are swept every 3 weeks. Due to commercial and industrial traffic on some of the city streets, sweeping is done every 10 days in those locations to help remove pollutants, heavy metals and garbage before they make it into the local waterways.

#### Q: How can I reduce flooding in my backyard?

A: Homes built after about 1980 have approved drainage plans associated with the plat, and every lot should be graded to the approved drainage plan. Property owners need to work with each other to regrade the lot lines appropriately.

For lots without an approved drainage plan, the City has an annual program to install storm sewer laterals, a backyard drain, or a mini-sewer to help minimize backyard flooding. Each site is unique and can be evaluated by an Engineering Technician to determine if one of these options will work. Although many sites are addressed each year, there is a waiting list for this program. Contact Engineering at 832-6474 to request a site evaluation.

#### Q: What should I do if I see someone dumping something into a street inlet?

A: It is against city ordinance to dump anything into a street inlet or let it run into a street inlet. This includes grass clippings, pet waste, fluids from vehicles, carpet cleaning or power washing wash water and concrete truck washout. When this happens, it is called an "illicit discharge". Please call the Inspections Division of Public Works at 832-6411 to report the location of the activity and activate cleaning of the inlet by city staff. A photo is also helpful. Remember, what enters the street drain ends up in area waterways. If you have a street drain in front of your house, keep grass clippings, leaves and branches from clogging the grate.