Native Grasses and Wetlands

IN YOUR NEIGHBOURHOOD

Over the past 50 years, Qualico Communities has developed many new neighbourhoods in and around Winnipeg. Several years ago, we teamed up with Native Plant Solutions, a branch of Ducks Unlimited Canada, to raise the bar for environmental responsibility and evolve the landscaping practices in our communities, particularly regarding storm water runoff and retention, and parklands. The result has been integrated systems of native grasses, shoreline vegetation and wetlands, creating communities conducive to the cycles of nature and offering stunning natural landscapes for residents to enjoy. This more natural approach has many benefits for all, including you.

Oak Bluff WEST

BENEFITS

The wetlands, shoreline vegetation and native grasses all work together to naturally purify the air and the water of your neighbourhood. As they are adapted to local climatic and environmental conditions, they comprise a truly sustainable choice that requires little-to-no maintenance.

Native grasses do not require fertilizers or routine watering, so there are fewer harmful nutrients flowing into the watershed and water is conserved.

The Lake Winnipeg watershed is the second largest in Canada; *it encompasses part of four provinces and four U.S. states. The water runoff from your neighbourhood is part of this watershed and contributes to or detracts from the quality of the creeks, rivers and lakes that flow into Lake Winnipeg.*

Water that drains from higher ground into the lowlands passes through the permeable, crushed-limestone trails and meets the shoreline vegetation of the wetlands, where its flow is slowed and effectively dispersed into the surrounding vegetation for nutrient absorption.

The wetlands are the last of the powerful filters to meet the runoff water. It is here that the remaining nutrients are absorbed by the submerged vegetation. The plant life further develops and provides food and habitat for the wildlife living within the wetland. Water, cleaner than it would have been without this natural purification system, then leaves your neighbourhood for rivers and lakes downstream.

WETLANDS

The wetlands in your community are, in essence, storm water retention ponds that protect your property and contribute to a healthier environment. They are biological systems that host a wide array of plants and animals which work to purify water.

Wetlands act as Mother Nature's filter: storing, dissipating, transforming or removing significant amounts of impurities in the water that runoff from the streets and fields into our watershed. These impurities include silt and excess nutrients such as phosphorus, which can cause harmful algae blooms like the ones seen in Lake Winnipeg.

Healthy wetlands become rich reservoirs of natural diversity for plants, mammals, birds, reptiles, amphibians and aquatic invertebrates. They are also home to dragonflies and other species that prey on mosquitoes.

A wetland can also be an effective tool for flood control. Its thick vegetation allows it to act as a sponge, slowly releasing water and decelerating its flow. When melting snow or heavy rains accumulate, the wetlands' large capacity to store water helps prevent flooding and water-logging of crops elsewhere.

Dry ponds serve this purpose as well. They are often placed in close proximity to wetlands, to hold excess water in times of heavy precipitation.

Algae growth is perfectly normal and beneficial to the wetland system. While wetlands filter out most of the harmful algae blooms – such as those derived from phosphorus - beneficial algae blooms still occur. This happens especially in relatively new wetlands that haven't fully developed their plant species. The excess nutrients that would regularly be absorbed by the developed plant species move directly to the algae, fuelling its growth.

SHORELINE VEGETATION

Bulrushes, cattails and other plants on the shoreline of the wetlands are specifically chosen for their ability to filter nutrients before they reach the water's edge, as well as for their capacity to regulate the flow of water coming in from the uplands. These plants are able to tolerate dry conditions and periods of prolonged flooding while providing a habitat to a wide variety of wildlife species.

NATIVE PRAIRIE GRASSES

Native grassland also plays an important role in 'carbon sequestering', the reduction of greenhouse gases in the air. One acre of native grasses can sequester (absorb) 1 to 1 ½ tonnes of carbon annually.

Native grasses do not require the routine mowing that traditional bluegrass sod does. This allows the City of Winnipeg to avoid high, ongoing maintenance costs and your neighbourhood has a larger amount of open space for public enjoyment.

Mowing is recommended only once every five years. Excessive mowing can weaken the root structure, allowing weeds to move in. If a controlled burn is required, it will be conducted by the City or Native Plant Solutions in a safe manner.

***For the grassland to thrive**, it is imperative that residents respect the areas where grasses are planted and never dump lawn clippings, topsoil or debris on them. Mowing the native grasses, planting trees, shrubs, annuals or perennials in the grassland areas is harmful to them and so is not allowed.*

In addition, the need for watering and fertilizer to maintain native grasses is virtually non-existent. On a cumulative basis, this vastly reduces fresh water use and the amount of nutrients from fertilizers going into our lakes and rivers. Native grasses also require little-to-no pesticide use.

Once the grasses are established, they are hardy and resilient to pressures in the environment. However, in their developing stages, native grasses are vulnerable and susceptible to being crowded out by weeds and other plants.

BENEFITS OF NATIVE GRASSES COMPARED TO SOD

- Native grasses require no watering or fertilizer. This puts less strain on the environment and provides a much more cost-effective option.
- The texture and colours of native grasses change with the seasons, providing a different seasonal landscape throughout the year.
- Much less mowing is needed to maintain native grasses.
- Canada Geese and Richardson's ground squirrels (gophers) are not attracted to the tall native grasses; they prefer short grass where predators can be easily spotted. While the Geese are a great part of our prairie landscape, their droppings and noise aren't quite as pleasant when they gather in large numbers. You may notice that in public areas where native grasses are prevalent, there aren't the excessive numbers of Canadian Geese that you see elsewhere.
- Voles and mice, which are highly adaptable to both human and natural environments, will tend to prefer the cover provided by native grasses, away from lawns and homes. However, homeowners should continue to take the usual precautions for the protection of plantings and homes.

TRAILS

The trails in Oak Bluff West are constructed of permeable limestone that is designed to manage the water that runs off above and below ground into the lowlands. This is an improvement from an impervious trail surface such as pavement, which would allow water to run over instead of through the trail, speeding the flow and increasing the risk of erosion that could damage the native grasses established in the lowlands.

The packed limestone surface is also much easier to maintain, and will depreciate less than a paved surface, thus reducing life cycle costs for the community that is responsible for maintenance and renewal.

HEALTHY, SUSTAINABLE COMMUNITIES

Your understanding of and respect for the wetlands, shoreline vegetation and native grasses are important to their health and well-being. Please help us create healthy, sustainable communities that reduce air pollution and contribute cleaner water to our rivers and lakes.

FOR MORE INFORMATION

Email: info@oakbluffwest.ca

For more information about native grasses or Naturalized Storm water Retention Basins, please call Native Plant Solutions at 204.953.8205 or visit nativeplantsolutions.com

QUALICO® communities

Oak Bluff WEST