

# MAHOGANY

Hopewell<sup>\*</sup>

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# WETLANDS EXPLAINED

#### **MAHOGANY WETLANDS**

This 74 acre highlight of the community parks system features a ring of pathways and interpretive areas surrounding scenic, naturalized wetlands. These wetlands are a destination for residents who wish to stroll, cycle or jog in a quiet, natural setting. Many species of birds and small animals will be attracted to the Mahogany Wetlands, making this the ideal place to spend a peaceful afternoon enjoying the beauty of nature close to home.

#### WETLAND FUNCTIONS AND VALUES

Wetlands represent one of the most important life-support systems in the natural environment, providing services including:

- A water filtration system removing contaminants, suspended particles and excessive nutrients, improving water quality and renewing water supplies
- An irreplaceable habitat nesting, feeding and staging ground for several species of waterfowl and other wildlife such as reptiles and amphibians, and also for many species at risk
- Natural shoreline protection protecting areas from erosion
- A reservoir helping to control and reduce flooding through water storage and retention
- A source of oxygen and water vapour playing a vital role in the natural atmospheric and climatic cycles

## **RECREATIONAL ACTIVITIES**

The wetlands will provide recreational benefits for those living in the community; however, some activities are limited due to the quality of the water. The water does not generally meet the standards of the Alberta Environmental Protection Act for primary contact, so activities that involve direct contact with the water such as swimming or wading are prohibited. Activities that are permitted around the area are photography, bird watching, bicycle riding, jogging, walking, picnicking and many others.

Winter ice-related activities such as skating and crosscountry skiing are not allowed, since the pond is not monitored for ice thickness and rapid water level changes can create dangerous soft spots.

#### WHAT CAN YOU DO?

- Participate in programs that help protect and restore wetlands. Contact your local community groups, environmental organizations
- Report illegal activity such as filling, clearing, and/or dumping in wetlands to the City
- Pick up all litter and dispose of in appropriate trash containers. Keep surface areas that wash into storm drains clean of pet feces, toxic chemicals, fertilizers, and motor oil, which eventually reach and impair our wetlands

For more information please contact the City of Calgary at 311 or Alberta Environmental Protection at ESRD.Info-Centre@gov.ab.ca









# WETLANDS LIFE CYCLE

#### **POND YEAR ONE**

The surrounding storm pond area has just been planted with special native grasses, and the aquatic bench at the shallow edges of the pond has been planted with emergent plants such as sedge grasses and rushes. These plant materials are designed to act as natural filters, and also help to remove nutrients from the storm pond. This area will quickly evolve over the next five years to become a natural environment with a diverse range of plant and animal species.

## POND YEAR TWO

The emergent vegetation is starting to flourish and over the next 1 to 2 years will start to gain a stronghold. As the plant material matures, it will start to crowd out the natural weed component in the topsoil that has been stabilizing the soil around the pond to reduce soil erosion, offering shade to the native grasses while their roots strengthen and take hold. The taller native grasses are intended to act as a filter to limit contaminants entering the storm pond off the adjacent residential lots and park land. These native grasses are only cut a few times in the first three years for weed control.

#### **POND YEAR FIVE**

Within five years the storm pond has matured to the point where it is functioning as intended - to filter out the sediment and contaminants entering the pond. At this stage, the pond features mature diverse vegetation, prolific aquatic edging to help absorb nutrients, and a variety of wildlife that can be heard and observed nearby. Residents will have the opportunity to enjoy the maturing storm pond's natural beauty and a wealth of activities such as biking, jogging, bird watching, exploration, reflective and photographic opportunities, as well as a variety of educational opportunities for the family.

# FREQUENTLY ASKED QUESTIONS

#### HOW DO WETLANDS CONTRIBUTE TO IMPROVED WATER QUALITY?

Wetlands serve as filtering basins, trapping eroding soils before they flow into rivers and lakes. Wetland plants and processes can help to neutralize fertilizer and pesticide runoff before these chemicals can contaminate groundwater, lakes and rivers.

### WHAT IS A "RIPARIAN AREA" AND WHY IS IT IMPORTANT?

The riparian area is the buffer of vegetation that borders wet areas like the wetlands, lakes, streams and rivers. The riparian area serves many functions, such as producing forage, maintaining wildlife populations, filtering sediments and contaminants, and providing habitat for wildlife.

## WHO MAINTAINS THE WETLANDS?

The City of Calgary is responsible for the function and maintenance of the wetlands after a maintenance period by Hopewell.

# DO THE WATER LEVELS FLUCTUATE WITHIN THE WETLANDS?

Yes, fluctuating water levels are a natural occurence and are necessary to maintain a dynamic and healthy wetlands. Hopewell does not not maintain the height of the water. Cycles of high and low water levels create diverse wetland vegetation that is more resilient to other stresses put on the system. In fact, the patterns of water-level change are the driving force that determines the overall diversity and condition of wetland plant communities and the habitats they provide.

# WILL THE WETLANDS INCREASE THE MOSQUITOES?

Concerns about mosquito problems are often raised in relation to wetlands. However, contrary to popular belief, healthy, well-functioning wetlands can actually reduce mosquito populations. One common belief is that wetlands should be drained to control mosquitoes. However, mosquitoes have a very short life cycle (from four days to a month), and their eggs can remain dormant for more than a year, hatching when areas are flooded with water. Therefore, even if a wetland has been drained, it may still hold enough water after a rain to breed mosquitoes. An artificially drained area may actually produce more mosquitoes than it did when it was a natural wetland. Healthy wetlands provide habitat for many insects and animals including natural enemies of mosquitoes. The predators keep the mosquito population low.

If you do have further concerns regarding mosquitoes and the wetland area, please call the City of Calgary at 311 or read more about their pest management strategy: <u>http://www.calgary.ca/CSPS/Parks/Pages/Planning-and-Operations/Pest-Management/Mosquitoes.aspx</u>