



# WETLANDS AND STREAMS

#### WHAT IS A WETLAND?

Wetlands are considered valuable because they provide numerous benefits to the surrounding ecosystem, to humans, the economy and resiliency of the watershed. Three factors are used to determine the presence of wetlands.

#### 1. Hydric Soils

Soils which present certain characteristics when saturated.

#### 2. Hydrophytic vegetation

Plants which grow in water or saturated soils.

#### 3. Hydrology

Saturation of soils with water for long enough to support #1 and #2.

#### WHAT IS A BUFFER?

Wetland buffers are areas surrounding wetlands and riparian buffers surround streams, rivers, and some ditches that help to protect and support the functions of these areas. Buffers provide many functions themselves. By ordinance, buffers are 50 feet wide around most wetlands, 100 feet if the wetland is of critical importance. Riparian buffers match the width of the floodplain and are at least 15 feet wide.

## WETLANDS & BUFFERS ARE KEY FOR RESILIENT WATERSHEDS.

Many of these amazing systems can:

- · Filter pollutants
- Cool storm water and help to maintain a stable temperature.
- · Trap carbon and nutrients.
- Healthy systems reduce nuisance species like mosquitos and large algal blooms.
- Lower flood heights and protect property by absorbing storm water runoff and slowing down the flow.
- · Recharge and protect aquifers.
- Give wetlands and streams room to expand during storm events.

- · Provide shoreline stabilization.
- · Provide erosion control
- · Habitat for plants and animals

#### **DID YOU KNOW?**

- 1 acre of wetland can store 1-1.5 million gallons of floodwater.
- Up to 1/2 of all North American bird species nest or feed in wetlands.
- Although wetlands cover only about 5% of the land surface in the lower 48 states, they are home to 31% of plant species.
- Nearly 1/2 of all endangered species depend on wetlands for survival.
- If headwater wetlands are drained or filled, upland runoff will move directly into streams and compromise downstream water quality. (credit: US EPA)

## HOW DO I KNOW IF I HAVE A WETLAND ON MY PROPERTY?

Wetland maps can be viewed at

www.dupageco.org/EDP/stormwater\_management/Natural\_Areas/397 39 or at the DuPage County Administration Building.

The maps are a good planning tool, but they are not 100% accurate. DuPage County staff are available to perform wetland determinations for private property owners for a small fee. Wetland determination request forms can be found at

www.dupage.org/EDP/Stormwater\_Management/Regulatory\_Services/ 1420/.

A wetlands specialist is needed to delineate the location and exact boundaries of any wetland on the property. For proposed development projects, the DuPage Countywide Stormwater and Floodplain Ordinance states that a wetland delineation be completed and a stormwater permit application be submitted and approved before a building permit will be granted for new development.





# DUPAGECOUNTY

WETLANDS?

STORMWATER MANAGEMENT

## WETLANDS AND STREAMS

#### **WETLAND TYPES COMMON IN DUPAGE** COUNTY

· Emergent wetlands, or marshes, have standing water and remain wet most of the year. These areas support water tolerant plant species that 'emerge' from beneath the water, such as Cattail and Blue Flag Iris. Wildlife includes Dragonfly, Great Blue Heron and Mallard.



· Wet meadow areas are seasonally flooded, although soils are typically saturated throughout the year, even without the presence of standing water. Vegetation normally consists of prairie grasses, sedges, and wildflowers, which are more tolerant to wet conditions. Wet meadows also provide habitat to frogs and birds.

- Forested wetlands support diverse plant species including trees, shrubs, and vegetation, such as Jack-in-the-Pulpit and Impatiens. Trees often show buttressing at the roots in response to wet conditions. Wood ducks and salamanders are found in forested wetlands.
- Seasonally flooded wetlands can be any of the types listed above that are only temporarily
- ponded or saturated. Seasonal, or ephemeral, wetlands are flooded in the late winter/spring and dry up partially or completely during the summer or autumn months.
- Riparian wetlands border our rivers and streams and are often inundated during flood conditions. Paddlers will notice plants like Arrowhead, Bulrush, Goldenglow, and wetland tree
- · Waters of DuPage, such as rivers and streams, and their associated riparian environments are included on our wetland map as they are also regulated by the county and the federal government.



Wetlands are protected by both federal regulations, governed by the

County Stormwater and Flood Plain Ordinance. Please contact our

office before commencing any activity in wetlands or buffers in order

to avoid a violation. We can help you determine if a permit is needed.

U.S. Army Corps of Engineers and local regulations under the DuPage

WHAT ARE THE REGULATIONS REGARDING

All developmental uses around wetland areas will eventually have a negative impact on the quality and value of the ecosystem. Therefore, buffer areas should remain intact and undisturbed. However, some low impact development uses are allowed under local and federal regulations as long as the buffer's functions are replaced, usually by planting native vegetation and/or removing invasive species. These impacts must be minimized and approved by DuPage County. If you have any questions regarding these regulations, please contact DuPage County Stormwater Management Department.

#### HOW CAN I HELP MAINTAIN OR IMPROVE A **NATURAL AREA NEAR MY HOME?**

Everyone can help maintain a wetland, buffer, or riparian system by using proper care. If your property has a wetland or waterway on site, make sure that you do not negatively impact the area in any way. This includes building unpermitted structures, including fences or sheds, creating brush/landscape waste or refuse piles, mowing or removing trees in the natural area, or planting non-native vegetation in or around the wetland or buffer area.



### WANT TO KNOW MORE?

**Homeowners Guide to Naturalized Areas** 

www.dupageco.org/EDP/Stormwater Management/1163/

**EPA Wetland Site** 

epa.gov/owow/wetlands/

**Society of Wetland Scientists** www.sws.org

**DuPage County Stormwater Management** 

www.dupageco.org/swm

Scan for the Wetland Map



