

Since the Clean Water Act of 1972 there has been nationwide interest in wetland conservation. As the country developed more of an understanding of the value of wetlands for reducing stormwater runoff, reducing flooding, recharging valuable groundwater for our wells, providing valuable habitat for all sorts of plants and animals that rely on wetlands, there became a need to do more to conserve the remaining wetlands as the nation was growing and filling in or draining those wetlands for development. In 1985, wetland conservation and protection became a more heightened federal concern, highlighted by the then President George H. Bush phrase of “No Net Loss” of wetlands. The wetland protection rules passed by Congress in 1985, and also tied wetland conservation to farming compliance in the Farm Bill.

Besides being a federal concern, there are many states and counties that have wetland conservation and stormwater requirements, including Kane, DuPage, and Lake counties, among others across the state. Wetland conservation and protection depend on the ability to identify areas of wetlands and delineate them in the field, so those areas can be conserved.

Wetlands are not the same as perennial bodies of water, such as lakes, streams, and rivers. Wetlands consist of land that is wet (saturated, ponded or flooded) for a specific amount of time during the growing season. In some areas, the water can be intermittent, lasting only 2 weeks at a time.

To be considered a wetland, the area of concern must contain water during the growing season for a specified period of time, plants that grow in wet conditions, and soils that developed in wet conditions.

The soils that developed in wet conditions are called “hydric soils”. During wet conditions, the soils become depleted of oxygen and the microbes in the soil change the iron in the soil from one form to another, leaving certain physical markers within the soil itself. These markers only form under saturated and anaerobic (without oxygen) conditions and the markers are irreversible. The properties of these markers and where these markers occur help the soil scientists and wetland scientists determine edges of wetlands to help with wetland identification, delineation, and conservation.

