BUFFER STRIPS

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The implementation of buffer areas along waterways is becoming more common throughout our landscape as we strive to protect water resources from contamination. Imposing a "buffer strip" adjacent to a watercourse seems like a logical and simple concept, but can be challenging when you consider the details of size, shape, plant materials, management and function of these areas. Waterways in Michigan are represented in several forms ranging from wetlands, streams, ponds, rivers and lakes. Each one of these may likely have different demands for a buffer strip and therefore the buffer strip itself can take on different forms to satisfy the demands. In all cases, the basic objective of the buffer is to provide protection to the watercourse to the potential contaminants.

The most basic buffer strip is simply an area of undisturbed, natural vegetation that is left in tact adjacent to the surface water feature. In many undisturbed areas of Michigan, this is a woody forested plant community. It's rather easy to provide this type of buffer strip when you have undisturbed zones adjacent to the water feature, but these situations are scarce when compared to water corridors that have had some sort of disturbance and development. As you move from undisturbed areas and begin to consider creating a buffer strip along a waterway that has been disturbed, the term "buffer strip" can mean many different things. A person interested in promoting fish habitat may have a different vision for a buffer strip than a terrestrial wildlife specialist. Also, some confusion will be expressed as you compare the suggestions for buffer strips from agency's or water quality advocates. Most of these organizations suggest or demand buffer strips adjacent to waterways, but they are not consistent in their suggestions, or they are not practical for golf properties. For instance, suggestions from the Surface Water Quality Division of the MI Department of Environmental Quality may be differ from the Natural Resource Conservation Service, the MI Department of Natural Resources or the Otsego County Water Quality Committee. To make sense out of the intent of these variable suggestions and apply a practical buffer strip on your property, I start by going back to the basic objectives of buffer zones, investigate the potential contaminants from turf and learn to recognize the characteristics of sensitive areas.

The most sensitive water zones on golf course properties are flowing water such as streams or drainage ditches where water moves through and leaves the property. These can range from high quality trout streams to turbulent rivers to drainage ditches. They are important because potential contaminants from the golf property or turfed areas can move off the propterty and cause an impact into the recieving water body. Following these flowing water areas in level of sensitivity are wetlands, lakes or ponds that the golf property shares with other owners and then finally, ponds that are resident on the property and are not connected with off property water bodies.

One of the primary challenges of water bodies on golf properties is that water is usually part of the design of the golf layout and is connected with play. In those cases, the turf area may be designed to be directly adjacent to the water and play can be expected to be in close proximity to the water. In these cases, a buffer strip can still be implemented to reduce the potential for inputs from turf management to affect the water quality. Potential inputs from turf management and buffer techniques for in-play and out-of-play areas will be discussed during the session.