

Horses and the Environment

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How do horse farms impact water quality? Let me begin by giving you our definition of a horse farm. For our purposes we will group together all horse operations from recreational or “backyard” horse properties of five acres or less to larger, profit seeking boarding, breeding, and/or training operations. No matter what size your “horse farm” is, many of the management issues are the same.

The most important land stewardship issues concern mud, manure, and pasture management. The way you address (or ignore) these issues impacts water quality. Even if you don’t have a stream, pond, or wetland area on your property, there’s one nearby and everything moves downhill. Your mud paddock, manure pile, or overgrazed pastures can be a source of pollution in the form of nutrients (manure & commercial fertilizers) and sediment (soil particles).

Why do we want to keep soil and nutrients out of streams? Isn’t it just fish food? One problem with having excess nutrients in a stream or pond is that they feed algae. The algae will flourish and eventually die back. When the algae begins to die the decaying process requires large volumes of oxygen which it “steals” from the fish and other organisms living in the water—suffocating them. Another problem associated with having excessive amounts of algae and/or sediment in the water is that they shade out other beneficial types of vegetation that grow deeper in the water.

What’s an economical, effective way to lessen the water quality impact of your horse farm? Install a buffer. For farms that have streams, ponds, wetlands, or even drainages with seasonal flow, the installation of buffers between your horses (mud, manure, & overgrazed pastures) and these waterways is one of the most effective Best Management Practices (BMPs) you can implement.

A vegetated buffer is an area of grasses, trees, or other permanent vegetation that will remain between your horses and surface waters. The buffer is protected from grazing by a fence. This vegetation acts as a natural filter, catching and utilizing nutrients (manure, fertilizers) and trapping soil, sediment, and pesticides that naturally move downhill in a rainstorm. The buffer vegetation can be grasses, shrubs, or trees. Trees planted in a buffer are especially beneficial because, in addition to filtering surface runoff, their roots can intercept nutrients that are moving beneath the surface, through the groundwater.

The bottom line-- Please don’t feed the fish. Install buffers to reduce soil and nutrient loss into waterways. Your management can help protect community waters and downstream—in the northern Virginia area the Chesapeake Bay. Horse owners can find more information about the care and protection of your pond, stream, or wetlands, the installation of buffers, or other farm planning services by contacting a Soil & Water Conservation District in your community. Find your local conservation district office by visiting this website <http://www.dcr.virginia.gov/sw/swcnds.htm>. or by calling the Virginia Association of Soil & Water Conservation Districts at 1-800-727-6354.