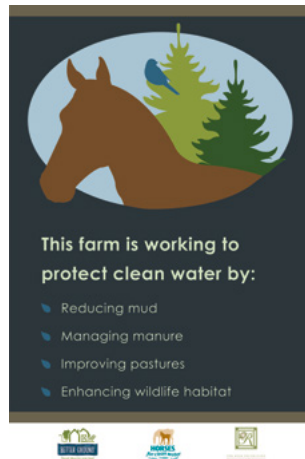


## Six Steps to Improve Your Farm, Protect Horse Health and Keep Water Clean

*If you feel a little overwhelmed by all the actions you'd like to take around your property, here are six that you may want to start with. Implement at least three of these practices and we'll deliver a Sound Horsekeeping sign to proudly display on your property!*



### 1. Cover your manure pile

Covering your manure pile will help it decompose faster, reduce mud and odors, and prevent weed seeds from landing on top and contaminating your clean compost. It's also crucial for protecting water quality. By covering your manure pile, you'll keep bacteria and nutrients from being washed off of your property and into streams and rivers. Many water bodies in our area exceed the state standard for bacteria and nutrients.

A tarp is the most inexpensive way to cover your pile. Plan to weight the tarp down with boards or sand-filled milk jugs to keep it in place. Stapling a board on one end allows the tarp to be rolled back more easily when you need to add to the pile.

Building a three-sided bin (or bins) to store your manure is the next step in good manure management.

### 2. Collect manure daily or at least every three days

Cleaning manure out of confinement areas every one to three days is the simplest and most important thing you can do to prevent mud. Most livestock manure contains 70-80 percent moisture. If manure is left to be trampled into the soil by livestock it will quickly turn to mud. Cleaning manure from confinement areas also helps prevent parasite reinfestation.

### 3. Direct water away from high-traffic areas

Install gutters and downspouts on barns and shelters to divert clean rain water away from animal confinement areas, stall entry-ways and other high traffic areas. Ideally the outlet for the gutters should send water to a well-vegetated area that does not receive a lot of use. Clean water can also be collected by stock watering tanks, rain barrels or dry wells. Water that exceeds the capacity of stock watering tanks should be diverted away from confinement areas.



#### 4. Create a confinement area

When horses are allowed year-round access to pastures, the pastures quickly become overgrazed and compacted. A confinement area or paddock is a place where your horse can be outside without negatively impacting pastures. Confinement areas can be used for different purposes, depending on the time of year:

**Winter and early spring.** Horses should be kept in confinement areas throughout the wet season. Saturated soils and dormant plants cannot survive continuous grazing and trampling. When soils are still wet they are easily compacted, suffocating the roots of grass plants and doing long term damage to vital air and water channels in the soil.

**Spring, summer and early fall.** Horses should be kept in confinement areas during the growing season when pastures have been grazed down to three inches. You can put horses back on pastures when the grass has re-grown to about six to eight inches. Consider the bottom three inches of the grass plant as an energy collector that needs to be left for the plant.

There are lots of creative designs for confinement areas, but one of the most important pieces is to use a footing such as gravel (3/8" or 5/8"), hog fuel or coarse washed sand in order to keep the area from getting muddy. For more information on confinement areas or footing, contact Snohomish Conservation District.



#### 5. Take a soil test

Fertilizer is almost always overused and may not be needed at all. Just because it's spring doesn't mean it's time to fertilize. If you apply fertilizer and your pasture grass doesn't need it, you've just wasted your time and money. In addition, that excess fertilizer will most likely be washed into nearby streams and lakes. The best way to find out if your pastures actually need fertilizer is to do a soil test. By finding out what

your soil needs, you will be able to choose a fertilizer with the right amount of nitrogen, phosphorous and potassium. A soil test will also tell you the pH of your soil along with recommendations for the application of lime. Acidic soils are common in our area and limit the availability of many nutrients. Applying lime will increase the soil pH and make the nutrients in the soil available to your grass plants. Contact the Snohomish Conservation District to get a list of soil labs, borrow a soil probe or to get advice on the best way to take a soil sample.

#### 6. Put up a bird or bat house

Attracting birds and bats to your property can significantly reduce mosquitos and flies. Violet green swallows and barn swallows eat about 6,000 insects a day and bats can eat more than 5,000 a night! (Violet green swallows do not nest inside the barn.) Make sure you use the right house to attract the birds you want to have around. Check out a local bird store or use one of the many resources online.



#### Questions?

Contact a Farm Planner at Whidbey Island Conservation District, 888-678-4922, or visit the Farm Planning page at [www.whidbeycd.org](http://www.whidbeycd.org)