Conservation Plan…What is it, and How Can it Benefit Me?

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This article is intended for Prince William County Residents. Information provided may differ for other counties in Virginia.

Want better grass or an increase in crop production? Perhaps you're wondering if your property can support livestock, or if you can increase/add additional livestock? If so, a soil and water quality conservation plan can provide you with the information you need for FREE. Many people may think that if something is considered 'free,' then it is also considered to not be any good or have much value. However, this is quite untrue for conservation plans! A conservation planner is putting your tax dollars to work! The planning process is designed to help farmers, and horse owners, manage their land, and meet profit and production goals, without degrading the environment. It's a win win situation for farmers and environmentalists alike! On top of that, there are no costs or strings attached to receive a conservation plan. To receive a conservation plan, you must be:

- Zoned Agriculture or Semi-Rural (Semi-Rural for equine only)
- Have, or planning to have, crop production and/or livestock (this includes horses kept for business or pleasure for Prince William County residents)
- More than 1 acre of agriculture production, whether crops or grazing livestock

The conservation planning procedure is usually very simple. We will meet with you, at your horse property or farm and walk the property with you, learning and understanding your situation and your goals. We will then take soil samples and send them to a lab to test for nutrients levels and pH so that you know if fertilizer or lime will help with your production goals. Back in the office we are busy gathering recommendations and information for your farm based on our visit. Once we receive the soil test results, we will finish putting together the conservation plan and call you. We then go over the plan with you, pointing out key information and answering questions. We are always here to help, before, during, and after you receive your conservation plan.

A conservation plan is written specifically for each farmer; no two conservation plans are exactly the same. The plan includes 5 sections:

- Maps
- Nutrient Management Plan
- Erosion Control
- Pest Management
- Chesapeake Bay Preservation Act

Maps

The Maps section includes several maps of the property, each map focusing on different characteristics. The first map is the **Aerial Map** which shows the property, any current or proposed fencing, water troughs, barn(s), etc. The acreage for fields/pastures is also

included on this map. The next map is the **Topography Map**, which shows the location of slopes, hills, drainage, etc.

Two different soil maps are also provided with the plan. These maps show and list the different soil types on the property. The soil types are there naturally based on the parent material they formed from. Soil types cannot be changed, but they can be appropriately managed to maximize their potential. However, a soil "type" is not the same as the fertility or pH level, which can be changed depending on the land management.

Soil maps identify the different soil types and their location throughout the county. They are based on soil surveys that were conducted during the 1970's and 1980s. Mapped soil types can be off by as much as 5 acres but most of the time, they are very accurate.

The **Soil Productivity Map** shows the different productivities of the soils on the property. Soil productivities range from I-IV, with I being the most productive and IV being the least productive. Thus, grass and crops will grow better on soils with productivities of I or II, and struggle more on soils with productivities III or IV. Crops/grass can still grow on less productive soils, but more care will need to be provided for these crops to grow successfully. Poorly productive soils will typically result in smaller yields of agricultural products produced, or require more land per animal to sustain the property appropriately. The other soils map is the **Leaching Map**. The leaching map shows soils on the property that are highly leachable. Leachable soils are soils through which water travels through very quickly. The water 'leaches' through the underlying soil, and potentially into the groundwater. Any chemicals/nutrients, resulting from over fertilizing or the use of pesticides/herbicides, can then get into the groundwater, and possibly well water, if the soils are highly leachable. Highly leachable soils are not very common in Prince William County, but if you have them on your property it is import to locate them and learn how to manage them.

The final map is the **RPA Map**. If there are any streams or ponds that are protected by a Resource Protection Area (RPA), this map will indicate them. RPAs are protected from certain types of land use or disturbance under the Chesapeake Bay Preservation Act.

Additional maps may be included, depending on the property and situation of the landowner.

Nutrient Management Plan

This is the heart of the conservation plan. A nutrient management plan helps you manage the nutrient levels needed in your soils for production and to manage the nutrients produced in livestock waste. The plan contains the soil test results for each of the fields on your property. It is a guide so you know exactly what fertilizer to put down in each field. The plan will also tell you whether or not you need lime, and if so how much. The nutrient management section of the conservation plan also includes general information on managing mud and manure, composting, pH, liming, and fertilizer.

Erosion Control
Erosion is the loss of soil. It is a significant problem because many of the high-quality nutrients are on the top layer of the soil. If this topsoil washes off the property, the land will be depleted of many of its natural nutrients and organic matter. These nutrients will eventually wash away into local waterways, polluting the water. You want your good nutrients on your property, not lost in a stream!

When doing site visits, we take measurements and estimate how much soil is being lost to erosion (there is always some loss, no matter how much groundcover you have). The erosion control section provides tips and advice of keeping groundcover on your property to prevent erosion. Also included in this section are information on different grasses to plant, how grasses grow over the course of a year, tips on managing your land to prevent overgrazing, how and why you should use a sacrifice area/dry paddock, what are the best stocking rates for your property, the importance of no-till for crops, cover crops, etc.

Pest Management
If you never had to deal with weeds on your property, then you know how to manage your land, or you're just extremely lucky! This section shows some of the more common weeds found in pastures. Information is included on insect and parasite pests for crops and farm animals, as well as weeds and invasive species. Also provided is a list of pesticides and herbicides to help control these pests, as well as some non-chemical methods. If you do decide to use a pesticide, this section of the plan will explain how to properly select and apply the right chemical. You want to avoid herbicides around highly leachable soils, for example and many herbicide applications require a waiting period before it's safe to graze livestock or harvest crops again.

Chesapeake Bay Preservation Act
This section is the whole reason why you are getting a conservation plan to begin with…to help improve the Chesapeake Bay and local watersheds. By simply reducing the excess nutrients from fertilizers and manure, as well as residues from herbicides/pesticides, you can improve the quality of the Bay. Fencing out livestock from streams and channels, or practicing no-till methods of crop production, are all good environmentally-friendly management skills. This section provides some general information on the Chesapeake Bay watershed, methods for improving its health and quality, and what you can do to help. Even if you don't have a waterway on or adjacent to your property, it is still good to read and share with friends and neighbors who may be unaware

Non-Prince William County residents
Every county is covered by a soil and water conservation district and many will write soil and water quality conservation plans, specific to each farm. Outreach programs and services offered by soil and water conservation districts each differ from one another, but the information and programs offered by each are targeted to help the local natural resources and farmers. To receive a conservation plan or related technical assistance, you must contact the soil and water conservation district associated with the county in which you reside (see below for more information).

In conclusion, a conservation plan is a guide for managing your farmland or horse property. It is specific to your property, and provided at no cost to you, other than your time. The plans are provided for your use and you are **not required** to incorporate the management techniques or practices outlined in the plan.

So, if you have agriculture land in Prince William County, and you're interested in a conservation plan, please call us at 703-594-3621 or visit our website at www.pwswcd.org. If you are interested in a conservation plan outside of Prince William County, visit http://www.vaswcd.org/swcdlist.htm to locate your local soil and water conservation district, or call us and we can get you connected.