

Core Conservation Practices for Basic Conservation Systems in Pennsylvania

Core conservation practices such as no-till farming, basic nutrient management, cover crop, basic pest management and conservation buffers can reduce the loss of nitrogen, phosphorous, sediment and pesticides from land while maintaining or increasing profitability. Implementing a basic conservation system has the potential to address 80% of the pressing environmental issues facing farms and to have a positive impact on the waters of the Commonwealth. Basic conservation systems are also good for wildlife.

NRCS and our conservation partners can provide technical assistance to help people help the land by implementing a basic conservation system. These systems can be adapted to any size or type of operation and have both on site and watershed wide benefits. You can make a difference in your fields or in your backyard. Cleaner water, cleaner air, healthy productive soils make a brighter future when people help the land by implementing Basic Conservation Systems.

Basic Nutrient Management

Managing the amount, source, placement, form, application method, and timing of nutrient applications can dramatically reduce nitrogen and phosphorous losses to the environment. Simply applying nutrients at a rate that plants can use them limits the potential for losses to the environment. In your fields and pastures soil test, develop a nutrient balance and apply following a site specific plan. In your yard and garden fertilize wisely; only as needed, soil test, and apply following label instructions.

Cover Crop

Cover crops provide seasonal cover reducing soil loss by preventing soil-raindrop impact and by disrupting the surface flow of water. Cover crops also scavenge excess nutrients at the end of the

growing season. Cover crops used on fields and gardens not only provide seasonal cover, keeping soil and nutrients in place; they also help to build soil.

Conservation Tillage and No-Till

Converting from conventional tillage to no-till can reduce erosion by as much as 90%. Sediment leaving a field carries nitrogen and phosphorous. Maintaining a minimum of 30% residue on your fields and gardens protects and builds soil and conserves water.

Basic Pest Management

Utilizing prevention, avoidance, monitoring, and suppression strategies to manage pests can limit the use and potential loss of pesticides to air and water. Keep it simple by rotating crops, scouting for pests, and only treating when needed.

Conservation Buffers

Conservation buffers are grass, trees, and other ground cover planted to reduce the impact of runoff from adjacent fields. Conservation buffers are often most beneficial in areas of the field that are lower producing and can be used to improve not only water quality, air quality and wildlife habitat but also to improve the management of a farming operation. Riparian forest buffers, herbaceous buffers, and wetland restorations are all examples of conservation buffers. Buffers can reduce as much as 80% of phosphorous and sediment in runoff water from reaching adjacent surface water by trapping it in the vegetation. You can use buffers on your farm and in your yard.

For more information on implementing a basic conservation system:
www.pa.nrcs.usda.gov.