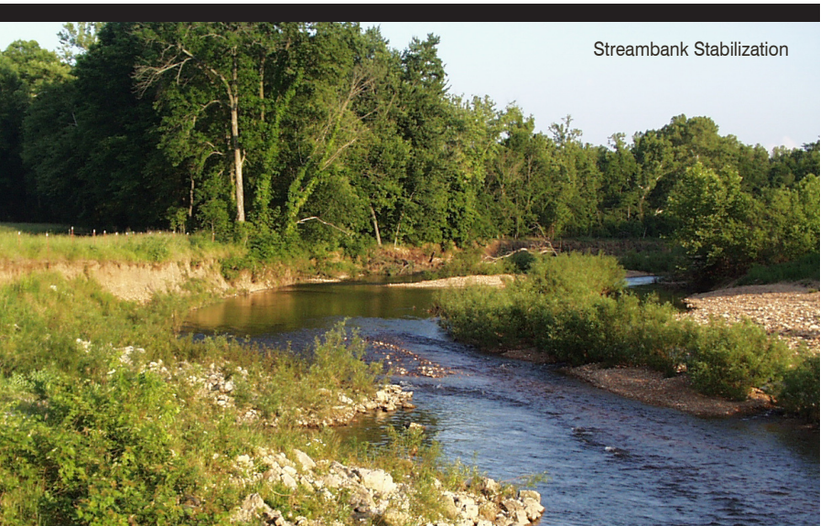
How to Improve Soil and Water Resources on Your Farm

Through the 114 local soil and water conservation districts, the Missouri Department of Natural Resources' Soil and Water Conservation Program provides financial and technical assistance to agricultural landowners for conservation practices. Below are a few examples of how these practices can benefit you.

- Keep your valuable topsoil.
- Get the best use of your soil and water resources.
- Develop the best nutrient and pest management plan for your needs.
- Install a rotational grazing system benefiting your livestock, water resources, land and time.
- Through irrigation management, efficiently and uniformly apply water to control runoff and conserve water supplies.
- Recycle animal waste for use on agricultural land.
- Protect your groundwater.

Conservation practices can save you time and money and increase your farm's production while protecting the overall natural environment of the state. Landowners can receive up to 75 percent cost-share to install practices through their local district.

The Soil and Water Conservation Program is funded by the one-tenth-of-one-percent parks, soils and water sales tax and administers those funds through local soil and water conservation districts.



Streambank Stabilization

Conservation Education

Missouri Department of Natural Resources
Soil and Water Conservation Program

www.dnr.mo.gov
800-361-4827

If you are interested in addressing any of these concerns on your agricultural land, please contact your local soil and water conservation district. For a listing of soil and water conservation districts visit www.swcd.mo.gov.

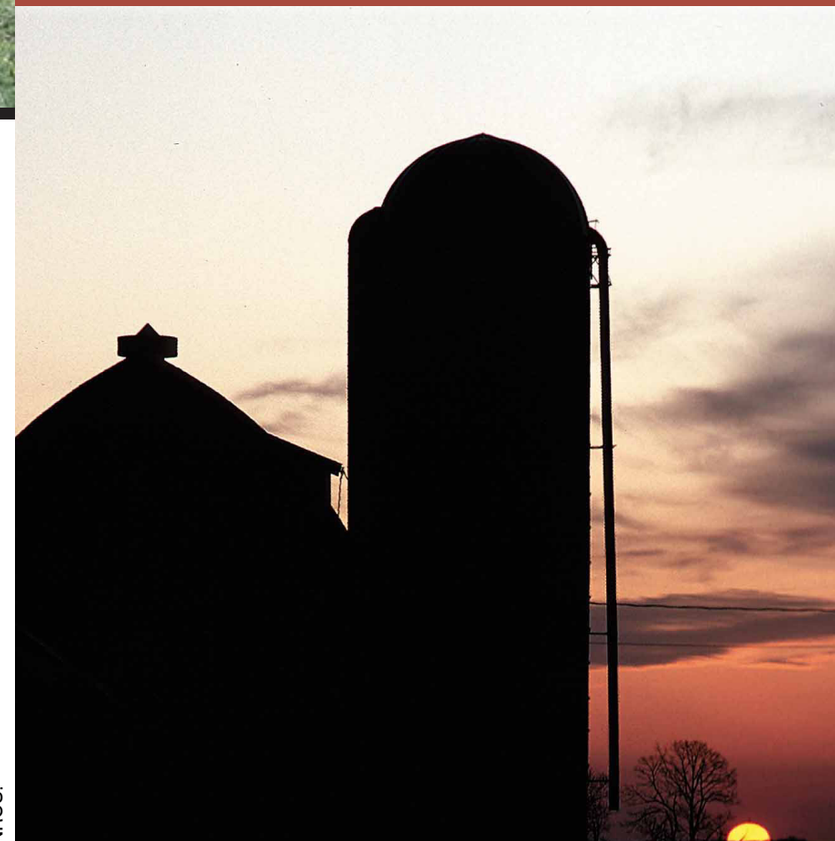
More information is also available at the Soil and Water Conservation Program Web site at www.dnr.mo.gov/env/swcp/ or by phone at 573-751-4932.

Printed on Recycled Paper Pub 2348

Cover photo courtesy of USDA NRCS.

Conservation Practices

Improve Your Farm



Missouri Department of Natural Resources
Soil and Water Conservation Program

Soil and water conservation districts focus on seven resource concerns to control soil erosion and protect water quality on agricultural land. Cost-share practices are available in the following categories:


Riparian Forest Buffer

Sensitive Areas

The concern: Sensitive areas are areas of agricultural land where current management has impacted erosion, surface water and ground water.

The solution: For the protection of water quality in streams, you can: plant grass buffers or woody species along the edges of crop fields or below cropland to trap runoff; plant trees or shrubs to reduce wind erosion; exclude livestock from streams; and place large stones or anchored cedar trees to eroding streambanks. To protect groundwater, you can: establish buffers or exclusion around sinkholes; create spring collection points for livestock use; and fill and seal abandoned wells.

Sheet, Rill and Gully Erosion

The concern: Sheet, rill and gully erosion is the unwanted removal of soil from the land surface or through incised channels by the action of rainfall and runoff.

The solution: If you see problems like this on your farm, you could: establish a good vegetative cover to stabilize the soil; build terraces to reduce the erosive force of water; use a no-till system; plant trees and shrubs at the edge of fields to help with wind erosion; build a pond to catch sediment; develop diversions to direct rainwater; and plant sod-forming grasses to efficiently transport rainfall.

Irrigation Management

The concern: Some irrigation systems do not distribute water evenly causing excessive runoff and use of water.

The solution: The cost-share practices in this concern will assist you in efficiently and uniformly applying water, applying the appropriate amount of nutrients and chemicals, and conserving water with: upgrades to your existing sprinklers and nozzles; the efficient conveyance of water from a source to the point of application; the collection and reuse of irrigated runoff; creating a closed system of water transport; the retention of irrigation water on the field; and underground piping and water control structures to manage excess water.

Nutrient and Pest Management

The concern: The runoff from improper nutrient and pest management practices can affect water quality.

The solution: To prevent excessive chemical runoff, you can: adopt new management techniques and/or technologies for applying commercial fertilizer, pesticide or herbicide; properly use manure as a plant nutrient source; and move excess manure from areas saturated with nutrients to land where they are needed.

Woodland Erosion

The concern: Woodland erosion is caused by the removal of soil or vegetation through livestock trampling or improper tree harvesting.

The solution: To protect woodlands and water from the impacts of livestock or recover an already damaged area, you can: plant trees and shrubs; install fence to exclude livestock; ensure that timber harvest operations use proper construction of logging roads and stream crossings; and correct and control gully erosion through proper timber harvest practices.

Animal Waste Management

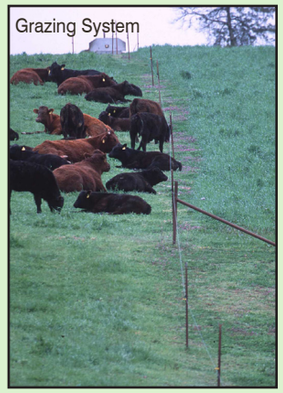
The concern: The improper management of animal waste can affect both water and air quality.

The solution: To protect the quality of water and air on your land, you can collect, control and manage your agricultural waste, manure and litter; safely dispose of livestock and poultry carcasses; and construct a composting facility to break down animal waste to be used to improve soil fertility and crop production.

Grazing Management

The concern: The steady use of an area by livestock can cause erosion problems and affect water quality.

The solution: You can make the best use of soil and water resources by: improving the vegetative cover on pastures; and developing a planned grazing system that may include developing water sources and water distribution, fencing to construct paddocks, lime to manage the pH of the soil and the interseeding of legumes.


Grazing System


Irrigation Management

How to Get Started

A call or visit to your local soil and water conservation district office will get you on your way to improving your farm through conservation practices. To find the district office nearest you, call 800-361-4827 or visit www.dnr.mo.gov/env/swcp/.
This website also offers:

- A complete list of cost-share practices available along with details about each.
- A step-by-step process for completing a cost-share practice.
- Soil and Water Districts Commission information.
- Links to publications, educational resources and partner agencies.
- History and information about the Soil and Water Conservation Program and the parks, soils and water sales tax.

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