Water management for livestock

Even with sufficient rain, farmers need to consider ways to improve the water-holding capacity of soil and the retention of water for livestock.

Letting livestock obtain water from streams that flow through your property can damage stream banks resulting in extreme erosion and increase in sedimentation.

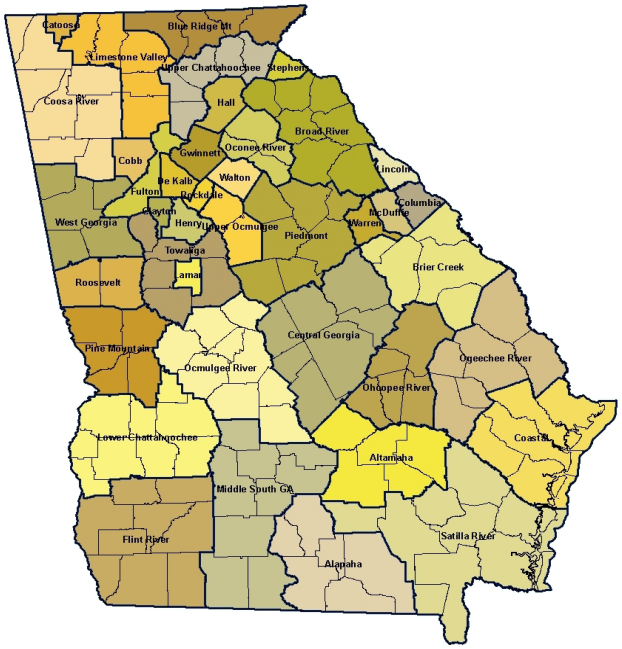
Unrestricted grazing introduces pollutants, such as livestock waste, into watersheds. This degrades water quality and introduces pathogens into the water supply that may cause disease in animals and plants.

To prevent livestock from accessing streams, fencing or natural buffers can provide effective barriers. Rather than allowing livestock to access a stream, water tanks can be installed to meet livestock needs. Some experts suggest using a portable tank that can be moved as needed.

More information

USDA Natural Resources Conservation Service in Georgia provides conservation planning and assistance to landowners that results in productive lands and healthy ecosystems. http://www.ga.nrcs.usda.gov

The Georgia Association of Conservation District Supervisors (GACDS) is dedicated to the protection and conservation of our state's natural resources. http://www.gacds.org/



How Do I Get Involved?

Georgia has 40 soil and water conservation districts led by 370 district supervisors. Supervisors are either appointed to a two-year term or elected for terms of four years. The next election of supervisors will occur in 2014.

If you are interested in becoming a supervisor in your district, information on the process is available by calling the Georgia Soil & Water Conservation Commission at 706-552-4470 or going to http://gaswcc.georgia.gov/how-do-i-become-swcd-supervisor.

Georgia Soil & Water Conservation Commission
4310 Lexington Road P.O. Box 8024
Athens, Georgia 30603
(706) 552-4470
http://gaswcc.georgia.gov

GSWCC

If you operate a small farm, you are not alone.

More than half of the farms in the U.S. generate less than $10,000 in gross cash farm income annually, according to the U.S. Department of Agriculture. Fewer than 10 percent of farms generate more than $250,000 in annual income.

Operating on limited acreage and often limited financial resources, you need to wisely manage your farm's soil and water resources to prevent severe erosion and nutrient runoff that can cause long-term harm to your farm's productivity.

Wise management of soil

Soils have formed from the interaction of climate, organisms, parent materials, relief, and time. Improving soil conditions not only improves crop and grass productivity, it also improves water infiltration and decreases runoff and erosion.

Consider using some or all of these soil best management practices:

Composting. Adding organic matter, such as leaves, to enhance soil is a long-practiced farming tradition. Recycling organic waste enriches soil and improves soil structure so that it will hold more water.

Low-till or no-till planting. Leaving a crop residue rather than disturbing all of the soil when planting can increase the amount of organic material and improve soil's water infiltration. It also reduces soil compaction, prevents wind and water erosion, and increases the soil's water capacity.

Cover cropping. Adding a cover crop between or with a cash crop can reduce soil evaporation and lower soil temperature. Depending on the crop chosen, the roots of cover crops can break up compacted soil. Cover crops can protect the soil from erosion, add nutrients (such as nitrogen), and provide a crop residue that adds organic material to the soil.

Rotating crops. Growing different types of crops in the same field in sequential seasons can improve soil fertility and structure as well as fight against pests.

Preventing overgrazing. Animals confined on too small acreage or in a small fenced-in area can quickly trample vegetation and compact soil. Developing a proper grazing plan gives soil and plants time to fully recover from defoliation.

Wise management of water

Water management for crops
Depending on rain to water your crop may be the ideal solution, but rainfall amounts can be unpredictable. Alternatives can include rainwater harvesting and supplemental irrigation.

Rainwater Harvesting
Capturing rainfall, sometimes called rainwater harvesting, is a good way to store water for later use by using barrels or tanks. When capturing runoff, some systems are designed with a series of tanks, so that contaminants may be diverted into the initial tank, while usable water is drawn from the last tank in a series.

Irrigation Methods
Traditionally farmers irrigated land by either flooding whole fields or flooding ditches in fields. This can result in a great loss of water due to seepage and evaporation. Better irrigation systems can include:

Drip irrigation
Sub-soil drip irrigation