

Stormwater Management

Fact Sheet

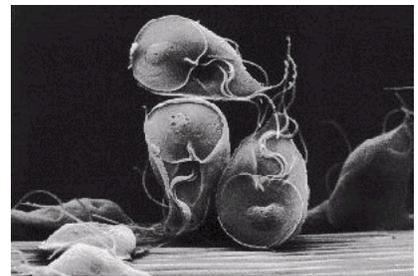
Livestock Management

Green pastures and sparkling waters are often the picture perfect representation of farms, but the reality may be far different. According to the United States Environmental Protection Agency, pollution from agriculture is the leading source of impairment to surveyed rivers and lakes. Livestock can contribute to non-point source pollution and soil erosion, which negatively affect the quality of our surface waters and groundwater. Animals that drink from contaminated sources may experience higher health risks and reproductive difficulties. Implementing a few simple management practices will prevent the pollution of waters used for human consumption and recreation, as well as improve the health of your livestock and pastureland.

THE ISSUES

Bacterial Contamination

Animal waste accumulates rapidly and washes into rivers and lakes during rain events. This waste contains bacteria, such as E. coli, salmonella, and shigella that can be harmful to human and environmental health when present in high levels. Protozoan parasites such as Cryptosporidium and Giardia also thrive in contaminated water and can cause gastrointestinal illnesses in humans and other mammals.



Nutrient Overloading

Nutrient overloading is another impact of fecal contamination. Animal wastes contain high levels of nutrients, which can cause excessive algal growth in streams and lakes. When the algae dies and decays, oxygen levels will drop to below sustainable levels for many species of fish and aquatic organisms. Not only is this unsightly, but it can cause damage to the local ecosystem that may take months to restore.

Soil Erosion and Sedimentation

Overgrazing and soil compaction can lead to bank erosion during rain events. These sediments not only carry bacteria and other harmful pathogens into the water, but will also eventually fill in the water source. Suspended solids reduce the penetration of sunlight in water, reducing the ability of plants to produce food and oxygen. Sediments also clog the gills of fish and other aquatic organisms and smother breeding areas.





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THE SOLUTIONS



Fencing and Limited Water Access

Buffers of trees and native vegetation along stream banks can minimize, intercept, and filter pollution and sediment runoff. Cobb County recommends maintaining a minimum 50 foot natural and undisturbed vegetative buffer along most streams and rivers. Please contact Erosion & Sedimentation Control at 770-528-2190 before disturbing any stream buffers. The ideal solution would be to keep all livestock away from stream banks or ponds by installing fences. Water can then be supplied through gravity fed pipes to a tank. If total exclusion is not possible, then allow animals limited access to the water's edge through fencing.

Waste Management

Composting and storage is a simple way to manage livestock waste and enrich forage, crop, and garden soils. Composting is safer for the environment than stockpiling manure because it holds the waste in a contained area for decomposition until the proper time for application. Composting can diminish odors, reduce the total volume of waste by up to 80 percent, and eliminate breeding sites for insects. It is an excellent soil conditioner and reduces the need for commercial fertilizers.



Rotational Grazing

Dividing your pasture into lots that will allow a 20-30 day rest period maximizes the dry growth of forage and adequately maintains the correct grass and legume species, leading to greater live-animal gain. After the animals are removed from the pasture, mow any uneaten plants to 3 inches. This will encourage new growth.

Soil Testing

Pastures should be tested every 2-3 years to determine soil pH, phosphorus, potassium, and magnesium levels before fertilizing. Adding the correct levels of fertilizer and lime at the proper time of year will ensure that the soil (and livestock) reap the maximum benefit without potentially harmful runoff.



To learn more about stormwater issues in Cobb County, please call 770-419-6435 or visit www.cobbwater.org.

This is an official publication of the Cobb County Water System, an agency of the Cobb County Board of Commissioners.