

PROBLEMS

Storm Water -It's Up To Us

Aiken County has two drainage systems - the sewers and the storm drains. The storm drain system was designed to prevent flooding by carrying excess rainwater away from city streets out to the river and lakes.

During storms in urban areas, rain water may mix with pollutants in industrial and household runoff, creating storm water pollution.

Pollution in storm water and urban runoff contaminates streams, rivers, and lakes. Storm water pollution closes beaches, harms aquatic life and increases the risk of flooding by clogging the gutter and catch basins.

Animal waste contributes to pollution when it is improperly stored or left uncovered near small streams and storm drains.

Animal waste contains nutrients-phosphorus and nitrogen- as well as bacteria. The nutrients fertilize the aquatic plants causing their proliferation and subsequent die-off, which depletes the oxygen in the water, killing aquatic life. The high bacteria levels in the water can cause gastro-intestinal disorders and other medical problems for swimmers.

Sediment in runoff from pastures and livestock facilities harms river life by clogging the gills of fish, blocking light transmission and increasing water temperatures.

SOLUTIONS

Facilities Design

- Site barns, corrals, and other high-use areas on the portion of property that drains away from the nearest creek or stream.
- Install gutters that will divert runoff away from livestock areas.
- Design diversion terraces which drain into areas with sufficient vegetation to filter the flow.
- Protect manure storage facilities from rainfall and surface runoff..

Pasture Management

- Confine animals in properly fenced area except for exercise and grazing time.
- Corrals, stables, and barns should be located on higher ground when possible and surrounded by pasture to act as a natural filtration system.
- Utilize fencing to keep horses away from Environmentally sensitive areas and protect stream banks from contamination.
- Use manure and soiled bedding sparingly to fertilize pastures and croplands.

Grazing Management

- Establish healthy and vigorous pastures.
- Subdivide grazing areas.
- Rotate animals to clean pasture when grass is grazed down to 3-4 inches. Let pasture regrow 8-10 inches before allowing regrazing.
- Keep animals away from wet fields when possible.
- During heavy rainfall, consider indoor feeding, a practice which keeps more manure under roof and away from runoff.



Stall Waste Production

Manure includes both the solid and liquid portions of waste. Horse manure is about 60% solids and 40% urine. A **1,000-pound horse** produces about 31 pounds of feces and 2.4 gallons of urine daily, which totals around 51 pounds of total raw waste per day. Soiled bedding removed with the manure during stall cleaning may account for another 8 to 15 pounds per day of waste. So for each stall, about 60 to 70 pounds of total waste material is removed daily. This results in about 12 tons of waste a year per stall.

Use and Disposal

- Compost soiled bedding and manure for your own use.
- Give away composted material to local greenhouses, nurseries and botanical parks.
- Leave manure waste in approved containers for pick-up and composting.
- Fertilize pastures, cropland, and lawns with compost. **Do not** apply compost just before or during rainstorms.



Composting bin

Pesticide Alternatives

The “chemicals only” approach to pest control is only a temporary fix. *Integrated Pest Management* is a more common sense approach for a long-term solution. Plan your “IPM” strategy in this order:

A) Physical Controls

- Pheromone Traps
- Tarps
- Bug Zappers
- Fly-Tight Storage Sheds

B) Biological Controls – Nature’s Way

Encourage the use of swallows, bats and other insect eating animals on your property

C) Chemical Controls – Your Last Resort

Use these least-toxic products:

- Pyrethrin-based insecticides
- Dehydrating dusts (e.g. silica gel)
- Insecticidal soaps
- Horticultural oils



Always Recycle

Aiken County Storm Water Best Management Practices (BMPs) For Horse Owners



Aiken County Storm Water Division
828 Richland Avenue, West
Aiken, South Carolina 29801
(803) 642-1535
(803) 642-1538 (fax)
www.aikencountysc.gov/stormwater

Stormwater Pollution Horse Owners



**Best Management Practices (BMPs)
For
Urban Horse Owners
Equestrian Centers
Boarding Stables**