

# REDUCING BACTERIA WITH BEST MANAGEMENT PRACTICES FOR LIVESTOCK: BUILDING LOCATION

Jennifer L. Peterson<sup>1</sup>, Larry A. Redmon<sup>2</sup>, and Mark L. McFarland<sup>3</sup>

### Description

The proper location of barns, storage areas, and compost piles on land with well-drained soils and away from streams, ponds, wetlands, and other bodies of water. Selecting a proper building location implies that all stormwater will be directed away from structures and towards filter strips or a vegetated water retention system by constructing berms, terraces, and grading.

#### Benefits to Producer

- Reduces accelerated runoff and soil erosion.
- ▶ Improves drainage from barnyard.
- Improves property aesthetics and increases property value.
- ▶ Improves water quality by reducing sediment, nutrient, bacterial, organic, and inorganic loading to the stream.
- Reduces stream bank destabilization and associated erosion due to trampling and overgrazing of banks.

## **Bacterial Removal Efficiency**

No data available on bacterial removal efficiencies achieved when siting buildings properly. Common sense suggests that if buildings are located on higher, well-drained soils and away from water bodies then water quality will be protected.



Properly locating all stables, barns, compost piles, and other facilities will help protect water quality. Photo courtesy of Jupiter Images, 2011.

The practice of locating buildings on proper sites can be used in conjunction with filter strips, fencing, prescribed grazing, and other conservation practices that have been shown to reduce concentrations of bacteria in runoff.

#### For Technical or Possible Financial Assistance

► Contact your local County Extension Agent, Soil and Water Conservation District (https://www.tsswcb.texas. gov/swcds) or the Natural Resources Conservation Service (https://www.nrcs.usda.gov/).





<sup>&</sup>lt;sup>1</sup> Extension Program Specialist

<sup>&</sup>lt;sup>2</sup> Professor and State Forage Specialist

<sup>&</sup>lt;sup>3</sup> Professor and State Soil Fertility Specialist