Do You Have Problems With:

- Barn yards, livestock loafing areas, and other places you need to work in are a muddy mess whenever it rains.
- Dirty water runs into streams, lakes, or roadside ditches.
- Clean water from roofs is mixing with dirty water from feedlots.
- Livestock are standing in mud and puddles, which is unhealthy for their feet.

Purposes and Benefits of Runoff Management:

- Water running off land around a livestock farm can be polluted with manure and mud impacting streams and lakes.
- Clean water running off roofs and other hard surfaces can be kept clean, instead of mixing with dirty water.
- The farm will look better.
- It's easier to drive and work around the area when it's dry than when it's muddy and wet.
- Livestock are healthier and cleaner when they are not stuck in the mud.
- An inch of rain on a typical barn roof produces 620 gallons of water, enough to make a big mess!

Runoff management means controlling water running off roofs, drive ways, feedlots, and other places around the buildings on a livestock farm.

Runoff control can keep the foot health of these cows in better condition.

Directing roof runoff away from buildings with guttering and downspouts can provide water for livestock.

Costs and Benefits:

Costs will depend on the practices your farm needs. Everything does not need to be done at once—NRCS conservation planners can help you decide which practices are the most important. Here are a few of the things that <u>might</u> be needed to control runoff:

- Gutters or other ways to catch roof runoff from buildings.
- Tanks or rain barrels and flexible piping to remove water
- Gravel or paving to protect areas that are heavily used.
- Earth-moving equipment to build waterways or diversions.
- Grass seed and mulch.

Roof Runoff

How to Install the Practice:

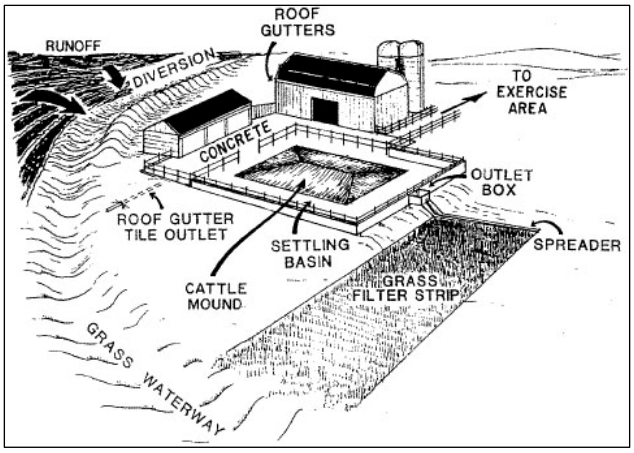
Diversions and waterways: Water may be running across your barn yard or into buildings from land uphill of the farm. By installing diversion channels, grassed waterways, and water catchments, this runoff can be steered away from the farm yard before it starts a problem.

Roof runoff control: The purpose of a roof is to keep rain out of a building—but, the rain has to go somewhere. If there are no gutters or channels to carry the water to a safe place, the water will land right around the building and cause problems. Installing gutters, rain barrels, gravel drains, or other devices can keep livestock dry and prevent mud.

Gravel drain

Heavy use area protection: Some areas get too much vehicle and animal traffic for grass to grow. These paths, roads, and animal loafing areas need additional protection, like gravel or paving, to withstand heavy use.

Vegetated filter strips and buffer areas: When possible, the best place for water to run is into grass. Water and pollutants can soak into the ground, and the grass will trap mud from the water. Grass filter strips or buffers need to be designed at the right width and slope so an erosion problem doesn't start and cause gullies.



Runoff Management Practices

Other Benefits:

Correcting water problems around your livestock buildings will benefit both you and your animals. You may find that after these problems are fixed, you spend less on building and equipment maintenance. Keeping livestock dry and healthy may also increase your profits.

Grass strips soak up water and pollutants from headquarters and barnyard runoff.

How to Maintain the Practice:

Just like cars and houses, conservation practices need some maintenance. Depending on what was installed to solve water runoff problems, you will need to take a little time each season to check some things:

- Pipes are running freely.
- No erosion has started anywhere around the barn yard.
- Gutters and downspouts are securely fastened.
- Gravel may need to be added periodically to certain areas.
- Grass on buffers and filters and in grassed waterways benefits from periodic mowing, although it should never be cut as short as a lawn—4 to 6 inches is good.
- If mud builds up on the grass, it will need to be cleaned out.
- Bare spots should be seeded and mulched to keep them from washing out.

The NRCS staff for your county can help you design the practices you need to solve water runoff problems. They have cost figures to help you weigh alternatives and will come to your farm and discuss your specific concerns.

Cattle feeding on a well protected dry feedlot

Cattle feeding on a hay ring in a muddy unprotected lot

Help is Available

NRCS Natural Resources Conservation Service

SMALL SCALE SOLUTIONS FOR YOUR FARM

Technical Help Is Available

Your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can assist you with designing a roof runoff system. They can also help you develop a Conservation Plan to solve other problems you have identified on your farm.

There is no charge for our assistance. Simply call your local office at the number listed below to set up an appointment and we will come to your farm.

You may also be eligible to receive financial assistance, through a state or federal program. Your NRCS office will explain any programs that are available so you can make the best decision for your operation. All NRCS programs and services are voluntary.

Helping People Help the Land

For More Information Contact the:

Natural Resources Conservation Service

60 Quaker Lane, Suite 46
Warwick, RI 02886
(401) 828-1300
Web Address: www.ri.nrcs.usda.gov
E-mail Address: NRCSInfo@ri.usda.gov

NRCS accepts applications on a continuous basis throughout the year.

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