Water Redirect and Gutters

Find more resources at www.manurelink.com

What is Water Redirect?

Water Redirect is installing gutters and downspouts on your property to direct rainwater away from animal holding areas and reduce runoff contaminated with manure and harmful pathogens from entering waterways.

Why should I redirect water?

Moist, muddy areas can be breeding grounds for bacteria, mosquitoes, and other insects. Standing in or walking through mud can expose livestock to skin and hoof diseases that often bring higher veterinarian bills. Following a practical management program will minimize the mud on your acreage.

Muddy areas should NOT drain directly into waterways. Muddy water or runoff from an animal confinement area should be directed to a vegetated filter strip or infiltration area, such as perimeter drainage or a drainage pit filled with gravel. The filter strip intercepts nutrients, sediment, and pathogens before the contaminants enter watercourses.

Where do I start?

Begin by installing gutters and downspouts on barns and shelters to collect and divert clean rainwater away from animal confinement areas. Locate downspout outlet pipes to divert clean water to an appropriate vegetated or infiltration area outside the animal confinement space. This will prevent the clean roof water from mixing with manure in the confinement area and contributing to mud build up and polluted runoff. This clean rainwater can also be collected in rain barrels and used to water lawns and gardens.

An inch of rainfall on a 3.7m x 3.7m (12' x 12') roof produces 340 L (90 gal) of runoff. Directing all that roof water into gutters and away from animal confinement areas is a simple and an immediate step toward reducing mud in high traffic areas around buildings.

LEPS
LANGLEY ENVIRONMENTAL PARTNERS SOCIETY

Use footing materials to reduce mud in high traffic and heavy use areas:

- **Sand**
- **Gravel**
- **Pea rock**
- **Use Wood chips or hog fuel sparingly, as they can also contribute to poor water quality.**

Gutters are in, now what?

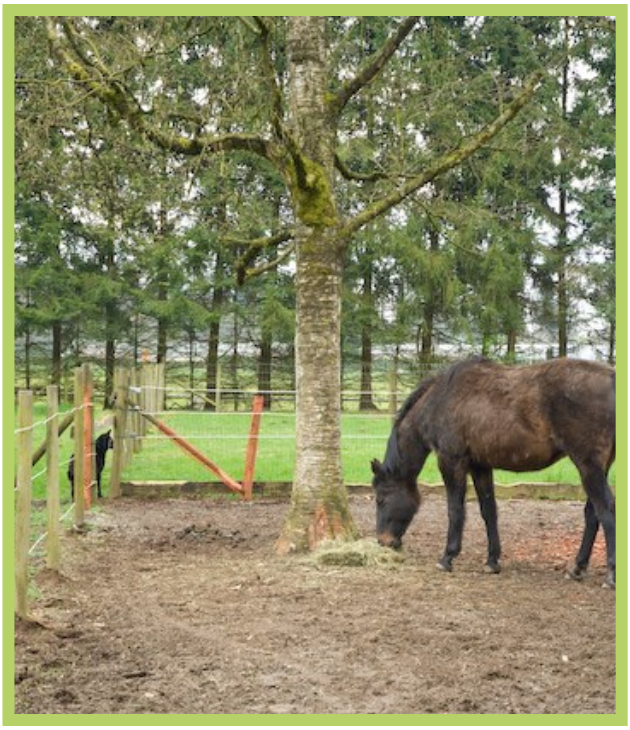
Once gutters and downspouts are installed, drain tiles, or simple ditches may be used (with proper care and planning!) to intercept overland rainwater flows and to redirect water away from your animal confinement areas. Redirecting overland runoff away from animal confinement areas prevents muddy conditions. Take care to direct these drainages to filter strips or infiltration areas.

Confinement areas are outdoor, nongrazing (or minimal grazing) areas in which livestock are confined by fencing or structures. These are used during the wettest months of the year (Oct.- March) to prevent pastures from becoming compacted and muddy. Confined livestock areas may also be called sacrifice area, heavy use area, feedlots, arenas or paddocks. They all function to protect your valuable forage ground and reduce mud and manure runoff on other parts of your farm.

Place livestock confinement areas in well-drained areas away from existing streams, ponds, wetlands, or other clean water. Use footing materials, like sand, to help keep these areas well drained. Different site preparation and footing materials are appropriate for different soil and livestock types.

Buildings and shelters should also be located in high, well-drained areas. Avoid placing buildings close to streams, ponds, swales, wetlands and other surface water.

Refer to the Code of Practice for Agricultural Environmental Management for specific setback requirements.



This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :

Environment and Climate Change Canada
Environnement et Changement climatique Canada

LEPS
LANGLEY ENVIRONMENTAL PARTNERS SOCIETY