

# FACT SHEET 5.7 CONTROLLING ANIMAL ACCESS TO WATERWAYS: WATERWAY CROSSINGS

A waterway or stream crossing may be necessary for animals to access a hobby farm pasture or trail system that is separated by water from other areas of the hobby farm. Direct animal access to wetlands and waterways can significantly impact the water quality and long-term viability of the freshwater resource. In addition to the physical damage that can occur to the banks and nearby vegetation from hoof traffic and grazing, manure deposited directly into the water can have an immediate impact on water quality and animal health.

A well-built crossing can provide farm animals with a safe and stable surface to reduce the risk of injury when crossing the stream channel or waterway. A designated crossing can reduce land disturbance, minimize muddy conditions and prevent impacts to the stream bed and water quality.

Stream crossings can be built with a variety of materials, however choosing the right location is essential. A crossing should be installed where the stream is straight, narrow if possible and where the channel alignment is less likely to change, as it would at a meander. Channel alignment at a meander often shifts because of the scouring affect the stream has on the outside edge of a meander.

#### **REGULATORY CHECK**

Since most hobby farms are not exempt from the MA Wetlands Protection Act (WPA 310 CMR 10.00), the crossing of any wetland or waterway generally requires approval. See your local Conservation Commission for assistance in complying with the WPA and for information on other approvals that may be required. Additionally, Federal, state and local regulations may govern the sizing of any culvert or bridge.





#### WATER QUALITY BENEFIT

Keeping livestock, horses and other animals away from and out of waterways is essential to water quality protection.

## **BUILDING A STREAM CROSSING**

- Contact the local Conservation Commission for information on local and state regulations that apply to work being completed in a stream channel or waterway. Most work within or adjacent to a waterway will require one or more approvals.
- Build the crossing during the dry part of the year.
- Grade the banks with gentle slopes to make it easier for farm animals to approach the crossing.
- Stabilize stream banks with landscaping fabric beneath a layer of crushed stone and gravel.
- Install a culvert (e.g. pipe, granite blocks, large field stones) parallel to the stream bank to convey flow below the crossing and allow for wildlife passage.
- Various stream crossing materials can be used (e.g. wood timbers, large flat stones, concrete slabs, etc.) to span the stream.
- Install fencing on either side of the crossing to prevent farm animals from accessing the waterway.

The above is simply a guide in developing a stream crossing strategy – each individual location and community will have different concerns and standards that will need to be addressed. Never construct a crossing without first consulting with your local Conservation Commission.

### STREAM CROSSING MAINTENANCE

As with most structures, maintenance is critical to ensure your crossing remains safe for you and your animals and that it is achieving the goal of protecting your riparian area while allowing your animals access to other parts of your property. Make sure you routinely inspect your stream crossing, particularly after a rain event, and make the necessary repairs (with Conservation Commission approval if needed).

