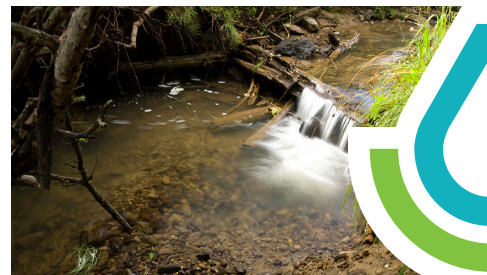




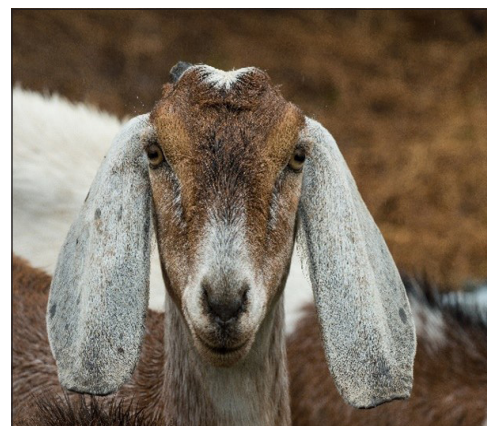
Small Scale Solutions for your Farm

Stream Crossing



Do You Have Problems with:

- Livestock knee deep in mud
- Crossing a stream with equipment
- Eroded stream banks and lack of vegetation
- Livestock loafing in streams and polluting the water
- Equipment damaging streams when crossing



Stream Crossing is an option for small farms!

A stream crossing provides a hard, stable area where livestock or equipment can cross a stream without damaging the streambed or banks.

Purposes and Benefits of a Stream Crossing

- Provide livestock access to all your pastures
- Crop and graze fields that are difficult to access
- Improve livestock health by keeping them out of the mud
- Keep your farm water cleaner by keeping livestock out of the stream
- Maintain and improve streambank vegetation and streambank stability
- You decide where the livestock cross the stream(s)
- Livestock will not tear up streambanks
- Less manure will get into the stream
- Equipment will not tear up stream bed and banks when you cross
- Trees and grass will grow along the stream and keep the water cooler and cleaner



Hog panel stream crossing





How Do I Build a Stream Crossing?

Stream crossings can be built in several different ways using different materials. The main things that need to be done are to slope the banks of the stream on each side and provide a firm streambed.

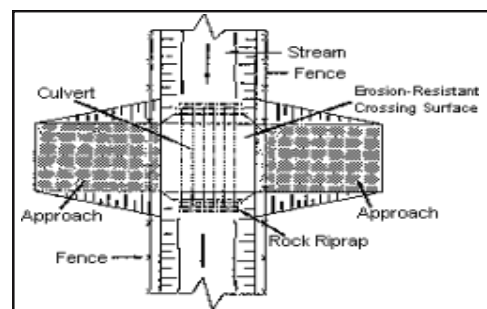
- Make banks flat enough for livestock or equipment to move safely down the bank.
- Protect banks with gravel laid over filter fabric.
- Make the streambed firm enough for cows to walk across or equipment to cross without causing ruts.
- For gravel or bedrock streams, no work may need to be done on the streambed.

The simplest type of streambed protection is to lay rock over filter fabric. However, livestock don't like to walk on large rock and smaller rock can wash out during high water flows.

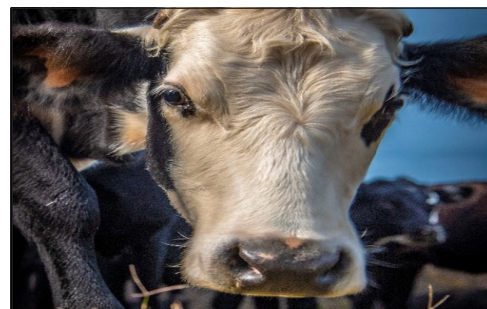
For mud bottom streams, there are several options. One option is to use hog slats (precast concrete units used in confined hog housing) laid over a bed of filter fabric and gravel. Another option is a cellular confinement system (a plastic web) that can be laid over filter fabric and filled with gravel. Either system can make a very good stream crossing.

Fencing

If the stream crossing will be used by livestock, an important part of the practice is to fence the stream so that livestock use the crossing and stay out of the stream and streamside vegetation.

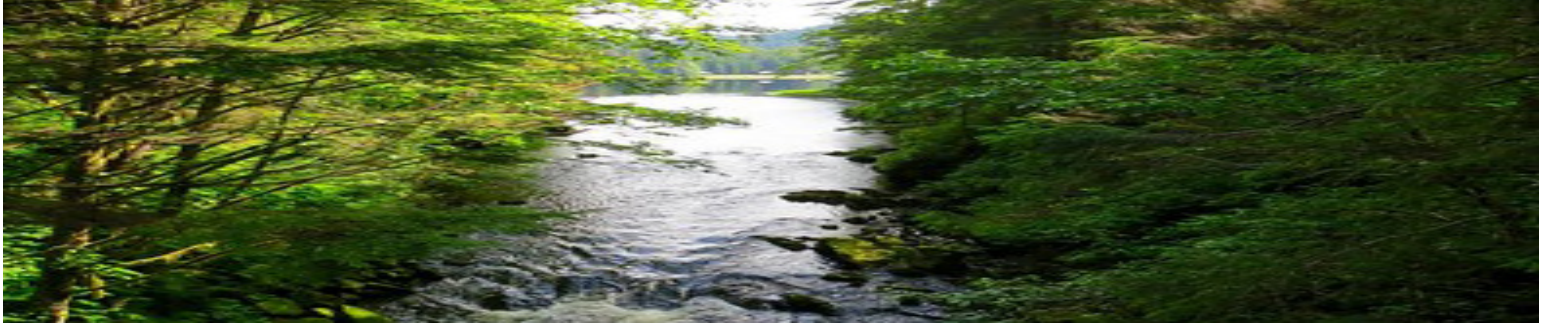


Typical stream crossing



Grazing help recycle nutrients.





How to Maintain a Stream Crossing

- Check the crossing after storms and make sure streambed and banks haven't eroded
- Repair eroded areas
- Reseed associated vegetation
- If livestock use the crossing, make sure fences are still in place

Associated Costs

The costs for a stream crossing will be different depending on what you use to build it and the size of the stream. Some of the costs to think about are:

- Grading the stream banks and bottom
- Gravel and filter fabric
- Hog panels, stone, or other material to go in the bed of the stream
- Fencing to lead the livestock to the crossing



Cellular confinement panels being backfilled with gravel



Fencing restricts livestock access to the crossing





Technical and Financial Help Is Available

Whether you measure your farm in terms of feet or acres, your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can help you develop a Conservation Plan to conserve, maintain, and restore the natural resources on your land and improve the long-term health of your operation.

There is no charge for our assistance. Simply contact your local office to set up an appointment. You may also be eligible to receive financial assistance. 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.

For More Information

Visit the [Natural Resources Conservation Service](#) or visit farmers.gov/service-locator to find your local NRCS office. You can also check with your local USDA Service Center, then make an appointment to determine next steps for your conservation goals.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.



NRCS conservationist assisting small scale farmer with developing a customized conservation plan.

