

Best Practice Information Sheet

Infrastructure management

Sheet 14.0a

Stream crossings

Why change?

Farm tracks and stock trails that cross small watercourses such as streams and ditches can cause difficulties, and result in hidden costs to your farming business. By taking action to improve your watercourse crossings, you can:

- reduce costs
- minimise stock injury and lameness
- reduce damage to farm vehicles
- ensure timely access
- minimise the risk of water pollution
- enhance the capital value of your farm.



Tracks crossing streams can lead to water pollution

Steps to success

- 1. Review the current situation** and identify where difficulties are being experienced, or pollution of small watercourses such as streams or ditches is apparent, by considering the importance, nature and frequency of the crossing and deciding whether there are other access points.
- 2. Identify potential opportunities** such as:
 - eliminating the need to cross the watercourse by providing livestock (or vehicles) with alternative crossing or drinking facilities
 - restricting access during wetter periods by reviewing your field use
 - providing improved access, e.g. by using stone chippings, correctly sized for the hoof size of your stock, on either side of the watercourse crossing point
 - considering other crossing methods such as bridges
 - culverting the crossing point, or an adjacent crossing that can be culverted more easily.
- 3. Calculate the cost-benefit of these opportunities** by comparing the costs of providing the new facilities with the longer-term savings and other resultant benefits.
- 4. Develop an action plan including:**
 - consulting the EA. Permission may be needed for instream or bankside works, especially culverting of watercourses, because of the potential adverse effect on wildlife and flood defences
 - making alternative arrangements while works are being carried out
 - ensuring the works themselves do not cause pollution, and working in dry weather to ensure that the access and culvert settle before wet weather.
- 5. Implement the action plan** taking care to:
 - consult the EA and downstream neighbours
 - if the site or watercourse has special conservation status consult other appropriate bodies
 - make sure you have obtained any necessary permissions
 - KEEP IT AS SIMPLE AS POSSIBLE.

Monitor progress to ensure pollution is avoided during works and that the benefits you seek are achieved

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Sheet 14.0b

Stream crossings - Practical examples

The EA may require dimensional sketches and a method statement of the proposed work that will typically include:

- (a) location of works
- (b) description of works
- (c) timing of works
- (d) who will perform the work
- (e) equipment to be used
- (f) contact details for all parties
- (g) disposal routes for any arisings - disposal to your land will be cheaper
- (h) source and type of any imported material
- (i) protection and maintenance of flow during works
- (j) materials storage before and during works
- (k) protection of environment from chemicals such as diesel fuel, lubricating oils, and shutter release oil
- (l) possible effects upon downstream operations such as water abstraction
- (m) liaison with downstream water interests such as fishing operations, abstraction, and drinking points.



Stream and ditch crossings

Improving the crossings of small watercourses can reduce stock lameness, infection and pollution. In this 2000 worked example, a small stream crossing and fences, aligned so as not to impede flood flows, were constructed to exclude 100 dairy cows from steep stony banks and a small watercourse.

Using farm labour, the total cost included £380 to fence and stabilise the bank with access, and £530 to provide a simple bridge.

The resulting savings included a reduction in lameness, injury and loss of production assessed at £4/cow: a total of £400/year. Other uncosted benefits included reduced costs of treating disease, less time gathering stock, reduced cleaning time for milking cows, and less water pollution.



Improving watercourse crossings saves money and protects the environment

Remember

- You may need land drainage consent from the EA. Consent is less often granted for main (designated) rivers.
- If the proposed work is within an area with unique protection or specific management requirements such as SSSIs and National Parks, permission from the appropriate regulator may also be required.
- A charge is levied by the EA on each application.
- Include a mention of all mitigating works within your application, e.g. measures to improve the environment.

For further information: Defra (www.defra.gov.uk), Environment Agency (www.environment-agency.gov.uk), ECSFDI (<http://www.defra.gov.uk/foodfarm/landmanage/water/csf/delivery-initiative.htm>), Natural England (www.naturalengland.org.uk), Cross Compliance Helpline 0845 345 1302 (www.crosscompliance.org.uk) and ART (www.associationofrivertrusts.org.uk)



This information sheet is part of a series providing farmers with advice on land management practices to protect water bodies, produced by Association of Rivers Trusts with support from the England Catchment Sensitive Farming Delivery Initiative. The advice will also enable farmers to use farm resources more efficiently and help meet Nitrate Vulnerable Zone and Soil Protection Review requirements under Cross Compliance and environmental regulation.



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