WEST CUMBRIA RIVERS TRUST NATURAL FLOOD MANAGEMENT (NFM) CASE STUDY:

BOOTLE FELL, CUMBRIA

ABOUT THE PROJECT

This project was carried out by West Cumbria Rivers Trust and involved installing a series of 12 cross drains to divert surface water from the Bootle Fell track, which deposits sediment into Old Close Gill. Instead, the surface water is diverted into rough vegetation to reduce erosion of the track. The project had an overall cost of £1,620 and was funded by DEFRA as part of their NFM programme.
In order for the project to go ahead, the following permissions were required:

- Historic England Scheduled monument consent
- Agricultural Permitted Development consent.

Motorway crash barriers were used to create the cross drains. They were easily transportable to the remote location and provide a long-lasting cross drain.

Images: West Cumbria Rivers Trust. Cross drains diverting runoff into surrounding vegetation

EFFECTIVENESS OF THE PROJECT

The cross drains do not store any water, but they divert runoff into vegetation where it will be stored in depressions, infiltrate or move slowly across the rough surface. As a result, large volumes of water could be prevented from entering the stream. This is very difficult to quantify but observations will be made in storm events. One benefit of the project is improved water quality due to reduced sediment runoff into Old Close Gill. This will also prevent the deterioration of the access track for farmers.