

New shallow grassed ditches can help to reduce the quantity of water, suspended sediment, nutrients, and pesticides transported through surface run-off.

A new grassed shallow ditch (also known as a swale) will collect surface water run-off or lightly contaminated water from flow paths in fields. The collected water will slow and settle out along the ditch and infiltrate into the ground, helping to slow the flow during heavy rainfall.

New grassed shallow ditches should be installed across a flow pathway or slope to help slow run-off.

Requirements

- Dig a wide shallow ditch with a minimum width of 3m and minimum depth of 0.5m, with gently sloping sides (no more than 1 in 3 gradient)
- Depending on the depth of topsoil, set aside topsoil separately to use on the bed and side slopes of the ditch
- Establish a dense grassy sward on the bed and sides of the ditch and maintain this cover throughout its lifetime
- For best results sow a seed mixture at a seed rate of 25g per square metre. The mixture should be a multi-species grass mix, such as creeping red fescue, smooth meadow-grass and creeping bent
- Do not graze during wet weather when poaching could damage and reduce effectiveness of the shallow ditch
- Check there are no restrictions to locating the option on the land such as historic features or RPA agreements
- Do not apply any fertilisers or manures
- Do not use pesticides, except for herbicides to weed wipe or spot treat injurious weeds, invasive non-native species, nettle or bracken

A newly constructed shallow ditches which has not yet been reseeded. It follows the contour of the field across the slope and once grass is established will be navigable by farm machinery. Source: <https://greatescapefarms.com>



Further information

- Grassed shallow ditches will trap sediment and slow flows better if located on smaller flow paths so that the ditch does not become overloaded by large volumes of overland flow
- This measure should be used within fields and along boundaries where they will intercept run-off
- This measure would work well on long, sloping fields, with the ditch placed along the contours to help break up the slope and slow the flow
- This measure should not be used on or affect designated routes such as a public rights of way
- Other measures such as check dams or silt filtration barriers can be used in the ditch to help slow the flow of water and nutrients and encourage infiltration. Further information can be provided by a FWAG SW Adviser



New grassed shallow ditches are required to be constructed by the 1st October 2022. This gives time for seed to establish before winter and provides more effective runoff attenuation.

