AGRICULTURAL LAND MANAGEMENT

Farmland can create rapid water runoff due to the ‘poaching’ or compacting of soils by livestock and machinery. Agricultural land management aims to reduce compaction, improve soil structure, and increase soil permeability in order to increase the capacity of the land to store water. Agricultural land is valuable and it is important that landowners are given incentives to encourage them to change the way they manage their land, such as through Catchment Sensitive Farming grants.

Soil land management

Cover crops can be utilised to protect and improve soil quality whilst reducing water runoff. Machinery practices can help to reduce soil compaction, such as by minimising loads and using flexible tyres on weak or saturated soils. This will also improve soil aeration which is useful for increasing infiltration and vegetation growth.

Runoff control

Techniques vary, ranging from in-field buffer strips and hedgerows that stabilise banks and intercept surface flow paths, to contour cultivation across fields instead of up and down, aimed at reducing surface water runoff.

Cross drains in farm tracks

Cross drains collect runoff and divert water off a track or path, which reduces the volume and velocity of runoff. A cross drain can also be used to trap soil and sediment to prevent it entering watercourses or being washed onto grassland.

Farm yard techniques

These techniques help to improve runoff management and diffuse pollution issues. Sediment ponds can manage and store runoff from roofing and tracks, along with strategic placement of field entrances and the construction of check dams.

Benefits

- Enhances soil productivity by increasing aeration and relieving compaction.
- Increases biodiversity by planting buffer strips and farm woodland.
- Reduces diffuse pollution through decreasing sediment transportation and fertiliser runoff.
- Reduces soil erosion which in turn, improves soil quality and productivity.