The management of land within the catchment of a river fundamentally affects its geomorphology and ecology. Agricultural practices including intensive dairy and outdoor pig units, and cultivation for arable crop production, particularly maize, can result in excessive soil erosion and surface water run-off. Intensive grazing of sheep can also result in a dramatic reduction in the ability of land to absorb rainfall, whilst extensive outdoor pig rearing can be a major source of diffuse pollution. In many cases, failure to address these issues can compromise the potential benefits from in-river enhancements. It is thus vital that the effects of land use in the local catchment on chalkstreams are considered at the early stage of any scheme proposals. For instance, the identification of major sources of sediment can be undertaken during rainfall events. Careful mitigation can significantly reduce the most damaging impacts.

In many (most) cases, angling groups do not have active control over land within the catchment. They do however always have the opportunity to influence those that do. This section examines the most significant regulatory and financial mechanisms that offer the best opportunity to effect beneficial land use changes.
Single Farm Payment

Under recent changes to the Common Agricultural Policy (CAP), farmers in England no longer receive agricultural subsidy based on the numbers of animals on their farm or the acreage of arable crops cultivated each year. Instead, they receive a single payment based on their historic management. A condition of their receipt of this new Single Farm Payment is that they must adhere to a series of strict conditions in their farm management (so-called 'Cross Compliance'). One of the most important of these from a river management perspective is the need for the preparation of a soil conservation plan. In this, farmers have to identify how they will reduce soil erosion from their land, by for instance contour ploughing, and the provision of adequate uncultivated buffer strips alongside watercourses. Failure to adhere to the provisions of this plan could, in theory, result in the loss of some, or all of their Single Farm Payment. This is thus a potentially strong mechanism by which fishery interests can seek to curb excessive fine sediment loading into rivers from agricultural land. The Single Farm Payment scheme is administered by Department of Food and Rural Affairs (DEFRA) to whom all queries regarding cross compliance should be addressed.

Agri-environment Schemes

Two key agri-environment schemes have been in place for a number of years. These are the Environmentally Sensitive Area (ESA) scheme and the Countryside Stewardship (CS) scheme. Both of these schemes are being gradually phased out and replaced by successors (see below). Despite this, some land is still covered by the existing ESA and CS schemes offering opportunities to promote ecologically favourable land management. Payments may be obtained, amongst others, for fencing of riverside buffer strips, reversion of arable land to grazing pasture and restoration of wet grassland habitat. In addition to the often attractive annual payments associated with management of designated land, one-off capital payments are also available.
As part of the CAP changes, the UK agreed to pay farmers an increasing percentage of European agricultural support for environmentally beneficial management. This change or 'modulation' of funds is of increasing importance to land management. Two key schemes have been recently introduced, as successors to ESA and CS, namely the Entry Level Scheme (ELS) and the Higher Level Scheme (HLS).

The ELS scheme provides a payment of £30/ha (2008) over the whole of the farm, provided that an agreed number of 'points' are achieved. Points are awarded for a range of options, for example the creation of ungrazed field corners, establishment of wild bird cover, and the retention/establishment of 6m wide margins around arable fields. ELS is open to all farmers.

HLS is, as its name suggests, a more rigorous and demanding scheme. Funding for it is strictly limited, with only farms based on land with an already high conservation potential eligible. The options for ecologically advantageous management are very diverse and can be tailored to the specific requirements of the land.

It is of great importance that fishery managers understand at least the basics of these schemes as detailed above, and recognise the huge potential benefits that can accrue to river systems by influencing farming interests to foster a positive approach to their adoption. Advice regarding the implementation of Cross Compliance and Environmental Stewardship is provided at:

http://wwwassociationofrivertrustso.org.uk/guidance/index.htm

The Catchment Sensitive Farming (CSF) programme was launched by DEFRA with the aim of developing measures to tackle diffuse water pollution from agriculture to meet Water Framework Directive requirements. Agriculture covers 70% of England's land area. Sources of diffuse pollution, including nutrients from fertilisers and manure, often arise as a result of farming.

DEFRA has drawn up a list of 40 priority catchments:
(http://www.defra.gov.uk/farm/environment/water/csf/pdf/catchment-priorities.pdf)

A Catchment Sensitive Farming Officer (CSFO) has been appointed for each of these areas. They are employed through either the Environment Agency or Natural England, and offer advice to farmers on how they can reduce the impact of their activities on groundwaters and surface waters. Where agricultural run-off is known to be affecting a chalkstream in a CSF priority catchment, contact should be made with the relevant CSFO, who should be able to offer advice aimed at resolving the problem. Grants are available for farmers to reduce agricultural impacts in priority catchments.
Rough grass headland

Field ploughed parallel across the contours to minimise run-off

Wide buffer strip of mixed vegetation and trees

Coppiced trees

Hedgerow

Fence

Influencing Land Management. Changing farming practice, the creation of buffer strips, and the development of grass headlands combine to reduce sediment and nutrient input to chalkstreams.

The information available in this manual is not intended to be comprehensive or definitive; in particular, details or topics relevant to particular circumstances may well not be included. Readers are advised to seek full professional advice before considering acting on any of the recommendations in this manual, and the WTT does not accept any liability for its content.

www.wildtrout.org