

Extensive research has been carried out to determine the best agricultural practices for water pollution control. However it is recognised that the implementation of such measures will only be effective with the co-operation of stakeholders.

Whilst many agricultural management options remain voluntary, farmer participation is increasingly seen as a necessary ingredient for catchment management. There is a need for more information on the realistic farmer uptake and acceptability of different measures to enhance the potential for pollution mitigation.

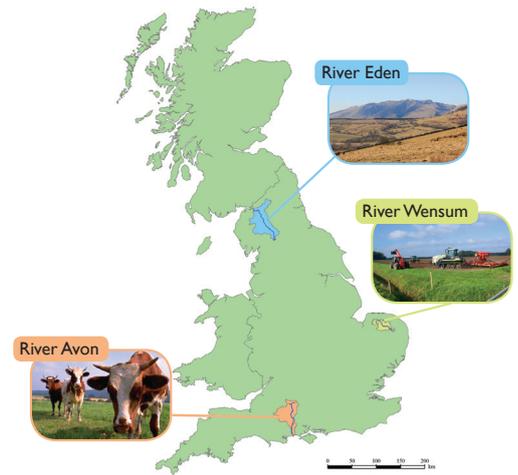


Figure 1: Map showing the three DTC catchments

A survey was conducted as part of the Demonstration Test Catchments (DTC) project to create a baseline regarding current agricultural practices and give insight regarding farmer attitudes to the future adoption of other mitigation measures. 73 farmers were surveyed between February 2012 - 2013 in three contrasting DTC catchments: the grassland dominated Eden catchment; the arable dominated Wensum catchment and the mixed farming of the Hampshire Avon catchment (see Figure 1). There was a great variation in size amongst the surveyed farms, varying from relatively small livestock farms in the Eden to large arable farms in the Wensum. Overall 87% of farmers surveyed currently participate in Entry Level Stewardship (ELS) and 40% in Higher Level Stewardship (HLS).

Current uptake of mitigation measures amongst farmers

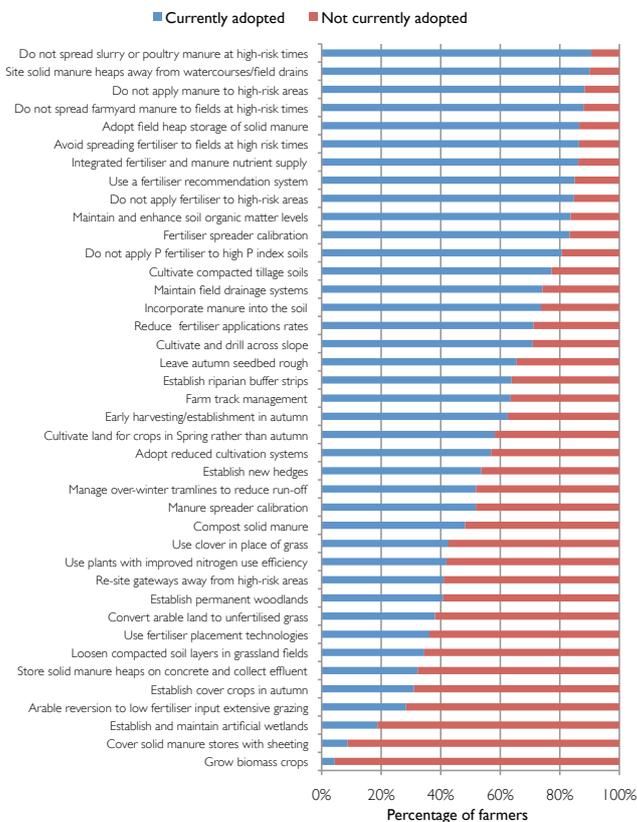


Figure 2: The current uptake of DWPA mitigation measures from the DTC baseline survey applicable to over 75% of participants.

Opinions were obtained on 70 diffuse pollution (DWPA) measures taken from a recent guide 'An Inventory of Mitigation Methods: User Guide' (see footnote). Farmers were asked:

“Do you currently do... mitigation measure? If not would you be likely or unlikely to consider doing it in the future?”

Of the 70 measures, the extent to which they are used varies widely. Figure 2 illustrates the current uptake of measures which are relevant to over 75% of participants.

- Measures with the highest uptake were all concerned with fertiliser or manure management and form part of cross compliance requirements for receipt of the CAP Pillar I Single Farm Payment.
- Measures which are compatible with current farm practice were more likely to have been adopted than those which require radical management or land use change.
- There was no obvious difference in uptake of measures according to whether they related to source minimisation, pathway reduction or receptor protection.
- Several measures with known benefits (e.g. cover crops) were less widely used than might have been anticipated. These could be particularly appropriate targets for increased adoption under advice campaigns or agri-environmental scheme support.

Farmers' attitudes to future adoption of measures

Survey participants currently not practicing in a particular mitigation measure were asked how 'likely' they would be to adopt the measure in the future. Figure 3 outlines the responses given for a selection of measures which are considered to provide benefits to the wider environment.

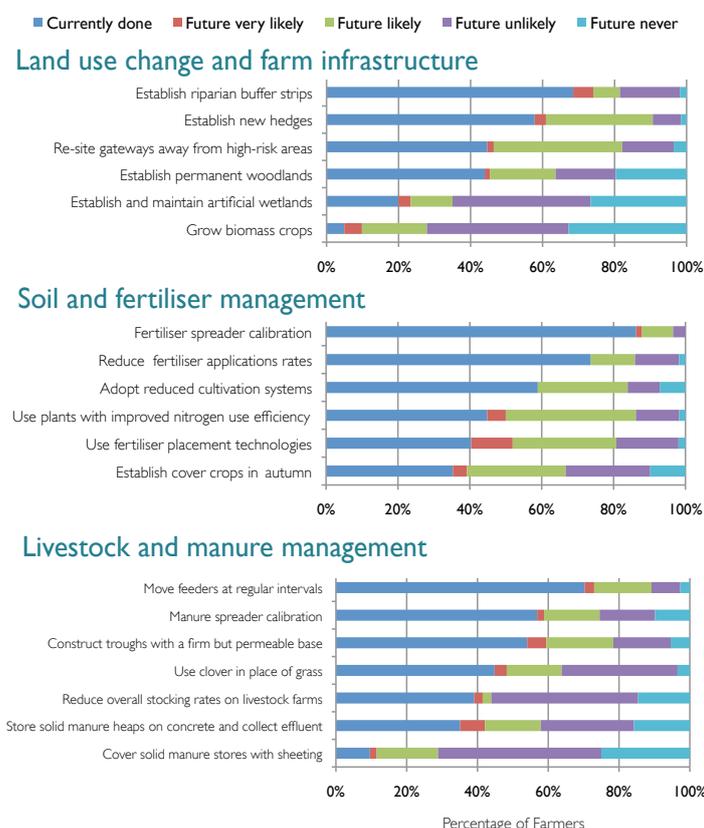


Figure 3: Farmer attitudes to future uptake of DWPA mitigation measures from the DTC baseline survey categorised by management type.

- Overall, measures requiring land use change were less likely to be adopted than measures improving farm infrastructure.
- Measures likely to be adopted in the future were those which decrease the use of fertiliser and fuel, therefore reducing costs.
- Farmers from the survey were more negative towards future adoption of livestock and manure management measures than soil and fertiliser management measures.

The baseline survey included questions about some measures which are not currently supported within agri-environment schemes. The results highlight several measures with relatively low current uptake but positive attitudes regarding future adoption, such as re-siting gateways, establishing cover crops and reduced cultivation systems, which could merit inclusion in such programmes. The findings also indicate that improvements in farmyard infrastructure are a priority for many farmers and suggest that radical changes in activities will not occur without substantial financial incentives or regulatory requirements.

It is intended that the DTC will repeat the survey in years to come to assess changes in attitudes.

Farmer - priority mitigation measures

The survey requested participants to list three mitigation measures they would prioritise on their farm. 65 farmers responded, listing 105 priorities in total, each stating between 0 and 3 measures (22% of farmers had no priorities). The priorities stated by participants have been categorised into management type and location of measures (see Figure 4).

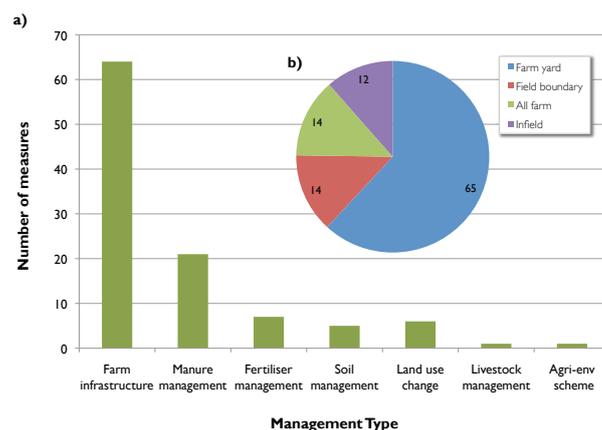


Figure 4: The number of measures respondents prioritised, categorised by a) management type and b) location

- Nearly two-thirds of the priorities involve changing farm infrastructure, particularly additional concrete areas. A variety of uses were identified, including concrete for manure heaps, diverting dirty water and track repair. Farmers suggested these are inexpensive options if grants are provided to assist with payment.
- Manure and fertiliser management included options related to correct timing and application efficiency, as well as storage covers.
- Location of priorities had a significant bias towards measures occurring in farmyards, whilst in-field and field boundary measures received less attention.