

UK-ADAPT

www.uk-adapt.org.uk

February 2007 Newsletter

This newsletter is the tenth of a series of monthly updates on the UK-ADAPT initiative. It is provided to all registered users on the UK-ADAPT website. Please forward to any colleagues that might be interested in UK-ADAPT and encourage them to use the website.

Overview

There has been limited activity on the UK-ADAPT website during February. We have a good database of relevant diffuse pollution projects but there is always scope for more, if you have any that you haven't yet added make this month the month you do!

Change in personnel

The more observant of you maybe aware of slight changes the website, Becky has left the project and I (Matthew Taylor) have now taken over the day to day running of the project.

New Projects

There are 175 projects currently listed on the website. Please continue to review all diffuse pollution projects undertaken by your organisation since 2000 and consider registering them on UK-ADAPT. If anyone has a large number of projects to register, or any problems please contact Matthew Taylor for assistance on 01623 844331 or uk-adapt@adas.co.uk

The next UK-ADAPT workshop

The Steering Group are planning a UK-ADAPT 2007 workshop, based around Defra's planned consultation on Catchment Sensitive Farming. We understand that this is likely to be released in spring, so please watch out for details of the workshop.

UK-ADAPT Feedback

If you have any comments on the website or require assistance with registering and editing projects or updating contact details, please contact us at uk-adapt@adas.co.uk

Featured Case Study

Each newsletter features a flagship project that has recently been added to the UK-ADAPT website. This month we focus on the **AMEWAM** project. An EU research project looking at surface water runoff and soil erosion leading to flood damage and decrease of water retention capacity of soils in small catchment areas.

If you would like your project to be featured in next month's newsletter, please contact uk-adapt@adas.co.uk

The Agricultural measures for water management and their integration into spatial planning (AMEWAM) - Runoff, soil erosion and sediment sources in central Norfolk, England

The AMEWAM project was an INTERREG IIIB funded project, conducted in three different European countries, German, the Netherlands and the UK. Within the UK, the study area was the upper catchment of the River Wissey in Norfolk.

The aims were to:

- (1) Monitor runoff and erosion.
- (2) Provide information to model runoff and erosion risk.
- (3) Provide information to help alleviate erosion.
- (4) Identify and estimate sources of sediments and pollutants in watercourses (as not all sediment comes from agriculture).

The findings of the project were thus:

It was found that the factors identified as controlling the occurrence of channel erosion; namely a slope gradient greater than 5%, relief within a field greater than 3 metres and rainfall greater than 10mm. It was also confirmed that erosion dominantly takes place down tramlines, also the importance of crop types, namely occurring in fields of potatoes, maize, sugar beet and oilseed rape when harvested under wet conditions.

The factors to be accounted for in the risk model are slope gradient, relief and crop type.

In terms of alleviating erosion it has become apparent that techniques to reduce runoff and erosion down tramlines are needed and that crops should be harvested before soils become too wet. If crops must be harvested in wet conditions the field must be cultivated as soon as possible afterwards, even if ploughing is done under wet conditions, as this has been shown to have stopped runoff from the harvested potato fields flooding the road. On light textured soils the aqueeel technique was tried to cut down erosion, the rollers, which are pulled behind the tractor, are indented to put hollows into the ground that hold rainfall. Although no erosion was located where the ground was indented, runoff and erosion did occur in the tractor wheelings, which were not obscured by the indents.

Soil carried from the land is probably not the major source of orthophosphate found in streams. Much of it must come from small sewage treatment plants, as must a proportion of the Total Organic Nitrogen found in the River Wissey.