



A clear solution for farmers

CATCHMENT SENSITIVE FARMING

Reducing Nutrient Levels In Yorkshire

West Rounton, North Yorkshire

Yorkshire Ouse, Nidd & Swale Catchment (8)

CSFO: Jonathan Skidmore

Description

The dairy farming business at Carrbridge Farm sits in the productive Wiske Catchment in North Yorkshire. It runs 250 cows plus 160 replacement heifers and extends to 182 ha of low lying land surrounding the Wiske tributaries of Carr Bridge Stell and Picton Stell.

Cows are housed in cubicles when with young stock and dry cows are bedded on straw.

The farm produces solid FYM, liquid slurry and a considerable quantity of dirty water due to the large area of outside yards and silage clamps. Originally the weeping wall slurry lagoon provided 6 weeks storage for effluent and 2/3 months for the separated muck.

Carrbridge Farm is within the Nitrate Vulnerable Zone designated in 2002 and the farmer has always worked hard to ensure the farm's compliance. The new NVZ 2008 rules present a number of challenges to many farmers in the area, one of which is complying with the new requirement for 5 months storage.

Whilst there is no single answer to the issues facing farms such as Carrbridge Farm, CSF has been able to offer practical advice and some financial assistance with enhancing farm yard infrastructure.

Pollution issues

The Wiske Catchment suffers poor biological quality from high nutrient levels damaging fisheries and habitat for water vole and otter.



Weeping wall slurry lagoon

These problems have been partly attributed to agricultural diffuse pollution. To address these issues the CSFO Jonathan Skidmore has been seeking a high level of engagement and advice take up in the Wiske catchment area.

The farmer took advantage of CSF soon after the initiative was launched in late 2006. A Whole Farm Appraisal reinforced several issues:

- 1 The need for additional slurry storage to ensure compliance with the 2008 NVZ programme and allow nutrients to be used more efficiently. The existing slurry lagoon had capacity for 3-4 months.
- 2 Intercept clean water run-off from large yard and pipe to water course
- 3 Reduce production of dirty water by roofing the outside feed area
- 4 Replace broken concrete yard and install new drain to divert foul water into slurry lagoon
- 5 Repair broken gutters and down pipes to keep rainwater clean
- 6 Soil test farm and insert results into PLANET for efficient nutrient planning
- 7 Sample solid FYM, slurry and dirty water to accurately establish nutrient value and save money on artificial fertiliser



Part CSF funded roof over feed area



Part CSF funded concrete yard with drain to divert foul water to slurry lagoon

Pollution solutions

In addition to the Whole Farm Appraisal a site visit by the CSFO resulted in a 2007 Capital Grant Scheme application for a roof to cover the feeding area and an inspection pit to intercept run-off from the large concrete yard area.

The application was successful and Mr Baines installed a 365m² roof over the feeding area. CSF funded approx 50% of the cost of the roof.

In a typical year the roof is diverting 219m³ or 48,180 gallons of clean rain water away from the slurry store. That is the equivalent of saving 24 unnecessary slurry tanker loads each year! In addition the farmer says his feed keeps dry and last longer reducing costs and labour even further.

Another application in 2008 to repair an area of concrete yard and ensure dirty water is securely contained and diverted into the slurry store was successful.

Additional rainwater has been kept clean by repairing broken gutters and downspouts. When the figures were calculated the farmer was very surprised just how much rainwater was previously going into his slurry store!

The farmer was also keen to take advantage of CSF funded soil sampling and slurry, muck and dirty water testing. The results proved very worthwhile in identifying fields with high P status. This data together with the slurry, muck and dirty water results were fed into the farms PLANET nutrient planning software and as a result the farm has made a significant saving on fertiliser this year. In fact, for the first time ever, no fertiliser was applied after 1st cut silage just careful application of slurry and the farmer has noted no loss of yield.

Farmer engagement and motivation

The farmer saw the advantage of early engagement with the initiative and was encouraged by the variety of practical advice on offer, capital grant assistance and help with soil and slurry/muck testing. Mr Baines very much hopes that other farmers take advantage of the initiative to improve their business efficiency and show they are doing their bit to reduce impact on the environment.

Catchment Sensitive Farming Officer (CSFO)

Jonathan Skidmore

Natural England, Northallerton

0300 060 2033/07771 941728

jonathan.skidmore@naturalengland.org.uk



www.naturalengland.org.uk/csf

Catchment Sensitive Farming (CSF) is delivered in partnership by Natural England, the Environment Agency and Defra.



Department
for Environment
Food & Rural Affairs



Environment
Agency



Funding is from the
European Agricultural
Fund for Rural
Development: Europe
investing in rural areas.