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Managing Metaldehyde in the River Wid Catchment

Maintaining water quality and crop productivity

The Chelmer and Blackwater Catchment Partnership has launched a new initiative with the focus on metaldehyde, working with farmers in the River Wid catchment. Over the last few weeks, every farmer (just under 100) in the catchment has been contacted or visited to discuss the initiative and its aim to substantially reduce concentrations of metaldehyde found in the River Wid and its tributaries.

River water sampling has shown that metaldehyde, the main active ingredient in slug pellets, regularly occurs in the River Wid catchment at levels above the EU Drinking Water Standard of 0.1ug/l, particularly over the autumn / winter period following applications. These levels have an impact on the Essex & Suffolk Water abstraction point at Langford and on drinking water compliance, because metaldehyde is difficult to remove during the water treatment process. The aim of this initiative is to work with the Wid's farmers and agronomists in a voluntary manner to see if we can keep these levels below the Standard this autumn using a variety of measures.

These measures include:

- Using integrated pest management options and cultural controls to prevent slugs, including the burying of trash, creation of a fine seedbed and rolling.
- Trying a 1.5% pellet or a ferric phosphate pellet on high risk fields and particularly for later applications and when land drains are flowing.
- Making sure operators are trained to PA4S level and all spreaders are calibrated.
- Thinking about where applicators are cleaned, whether that be with an airline or washed down...*in a recent local study, a "blue" applicator was washed down and the concentration of metaldehyde in the wash water was 1100µg/l this equated to 0.22g of metaldehyde, enough to contaminate 2.2 million litres of water.* Applicators should be brushed off in the field after use and if being cleaned, this should be done on a vegetated area or away from the concrete yard, which has the potential to wash into a drain and on into a ditch and the river.

Monitoring of rivers and water quality will continue in the catchment this autumn with regular updates and we will inform of the outcomes at the end of the year.

All farmers in the Chelmer and Blackwater catchment can employ these measures in addition and think about their slug pellet use. There will be a lot of focus on this important product this autumn – let's work together and prove that we can achieve compliance in our catchment together.

If you have any questions about the **Managing Metaldehyde in the Wid** initiative, would like to know more about your slug pellet options or would like to book free PA4S training or a free calibration of your slug pellet applicator with SCS, please contact Teresa on 07792 169545 or e-mail: teresa.meadows@nwl.co.uk.



River Wid Catchment



92%

the amount of times that
the Wid sample point exceeded
the 0.1ug/l Standard in 2012/13.
In 13/14, this was 48%....can we
make it 0% this year?



Nitrate Study Findings

The second year of our nitrate study with farmers in the catchment is now complete and the results are in! Given the very wet autumn and winter of 2012/13, the group decided that it would be interesting to sample land drains again last autumn to see if a more "normal" year made any difference to the results. Using a nitrate testing kit once a week, two or more land drains were sampled per farm for a period of 13 weeks from 08/11/2013 – 31/01/2014.

The results this year for the amount of nitrate leached according to crop type, reflected the results of last year, with **more nitrate being leached from winter wheat crops** (average of 38.8mg/l) compared to OSR (28.5mg/l).

Where a cover crop had been sown, the nitrate leaching from the field was negligible in contrast to where manure had been applied, which were the highest leaching fields of all. In this way, if you have high readily available manures (e.g. sewage sludge or poultry manure) to be applied, it would be best if these were to go on before your OSR crop wherever possible.

The most notable difference this year, was the higher amount of nitrate to be lost from land that had been ploughed compared to those fields that had used a min-till or direct drill based system.

Cultivation	Mean Nitrate Level (mg/l)
Plough-based system	44.3
Min-till or direct drill based system	24.5

As a result of the nitrate study findings, we will be running a cover crops trial in the catchment this autumn to demonstrate the different alternatives available and their capabilities for improving soil structure, competing with weeds, retaining nitrogen in the soil and much more. Keep an eye out for an invite to an event later in the year to see the trial and results for yourself.

Trees for Rivers

100% funding for tree planting in our catchment

Planting trees alongside a watercourse has wide reaching benefits, these range from reducing pollutants entering the water and creating shade for fish. The Woodland Trust, working in partnership with the Chelmer and Blackwater Catchment Partnership and Essex Wildlife Trust, are offering landowners a **100% grant** to plant trees alongside rivers.

This grant is available to landowners within the Chelmer and Blackwater catchment for free trees and protection guards, if the planting meets one or more of the following guidelines:

- New planting creates shade along the river bank to aid cooling water temperature – important for fish and invertebrates.
- The trees will stabilise the bank and hold sediment in place preventing washout into the river channel.
- The trees will act as a buffer to surrounding land use, prevent spray drift and dust from arable land and pollutants in urban areas entering the water.
- New trees will be planted to replace aging veteran or diseased trees.
- New areas planted as wet woodland on the floodplain, a minimum of 0.5ha – wet woodland is not only a declining habitat it also can help prevent flooding downstream by holding water upstream.

All projects must plant a mix of native species and where possible incorporate the rare native black poplar. Planting must be completed by 31st December 2014.

To find out more, please contact the Woodland Trust on 0845 293 5689 or e-mail: woodlandcreation@woodlandtrust.org.uk.



Dates for your Diary

Rochford Ploughing Match	Saturday 20 th September	South Fambridge Hall, Rochford, SS4 3LS	d.milbourn@whirledgeandnott.co.uk	01702 783377
Greenstead Green Ploughing Match	Sunday 28 th September	Maplestead Hall, Lt Maplestead, Halstead, CO9 2SL	paulgoodchild@hotmail.co.uk	01376 325363
Ongar and County Ploughing Match	Saturday 4 th October	Baileys Farm, Good Easter, Chelmsford, CM1 4SF	opmsecretary@tiscali.co.uk	01277 372252

Look out for the next catchment newsletter: Autumn 2014

The Chelmer and Blackwater Catchment Partnership is supported by:

