

Chelmer & Blackwater



Managing Metaldehyde in the River Wid – improving water quality through voluntary changes to slug control practices

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A clear solution
for farmers

CATCHMENT SENSITIVE FARMING

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In partnership with
**Environment
Agency**

Outline

- Background
- The Initiative
- Farmer Engagement
- Water Quality
- Recommendations



Background

- Metaldehyde is an important product
- Large area of oilseed rape grown
- Compliance with the EU Drinking Water Standard of $0.1\mu\text{g/l}$



The Catchment



Chelmer and
Blackwater
Catchment



The Catchment



72 Miles of River

1000 km²

650 Farmers

70% Arable

1 Catchment Advisor

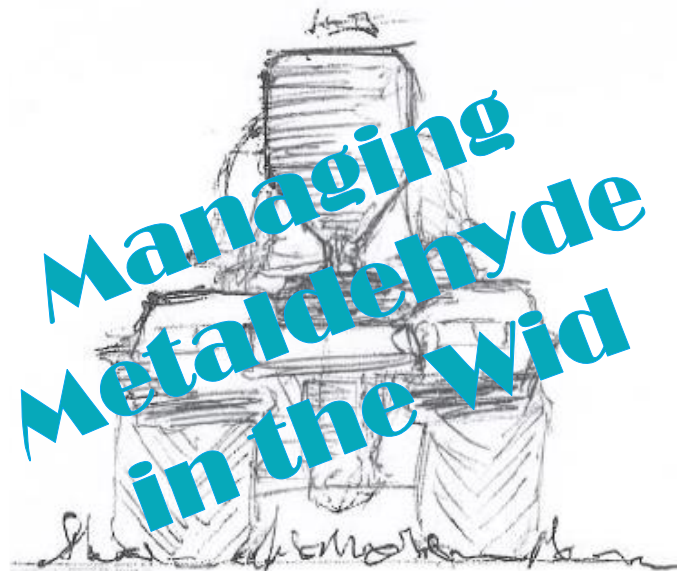
Managing Metaldehyde in the Wild

- Other national / industry pilot initiatives for metaldehyde
- This one solely from Essex and Suffolk Water

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...looking at a range of options...

Managing Metaldehyde in the Wid



- Wid catchment in Essex = 97 holdings with >20ha
- High concentration of OSR and wheat, heavy clay soils and under drained.
- Consistently high concentrations of metaldehyde found during autumn in previous years
- Aim : Improve water quality for metaldehyde

Managing Metaldehyde in the Wid

Asked farmers and their agronomists to do what they can to keep metaldehyde below 0.1ug/l. This included:

- Discussion on cultural controls
- The identification of high risk fields,
- Spreader calibration
- The location of spreader cleaning
- Operator training
- Options for using 1.5% or ferric phosphate pellets, as well as the timing of applications.

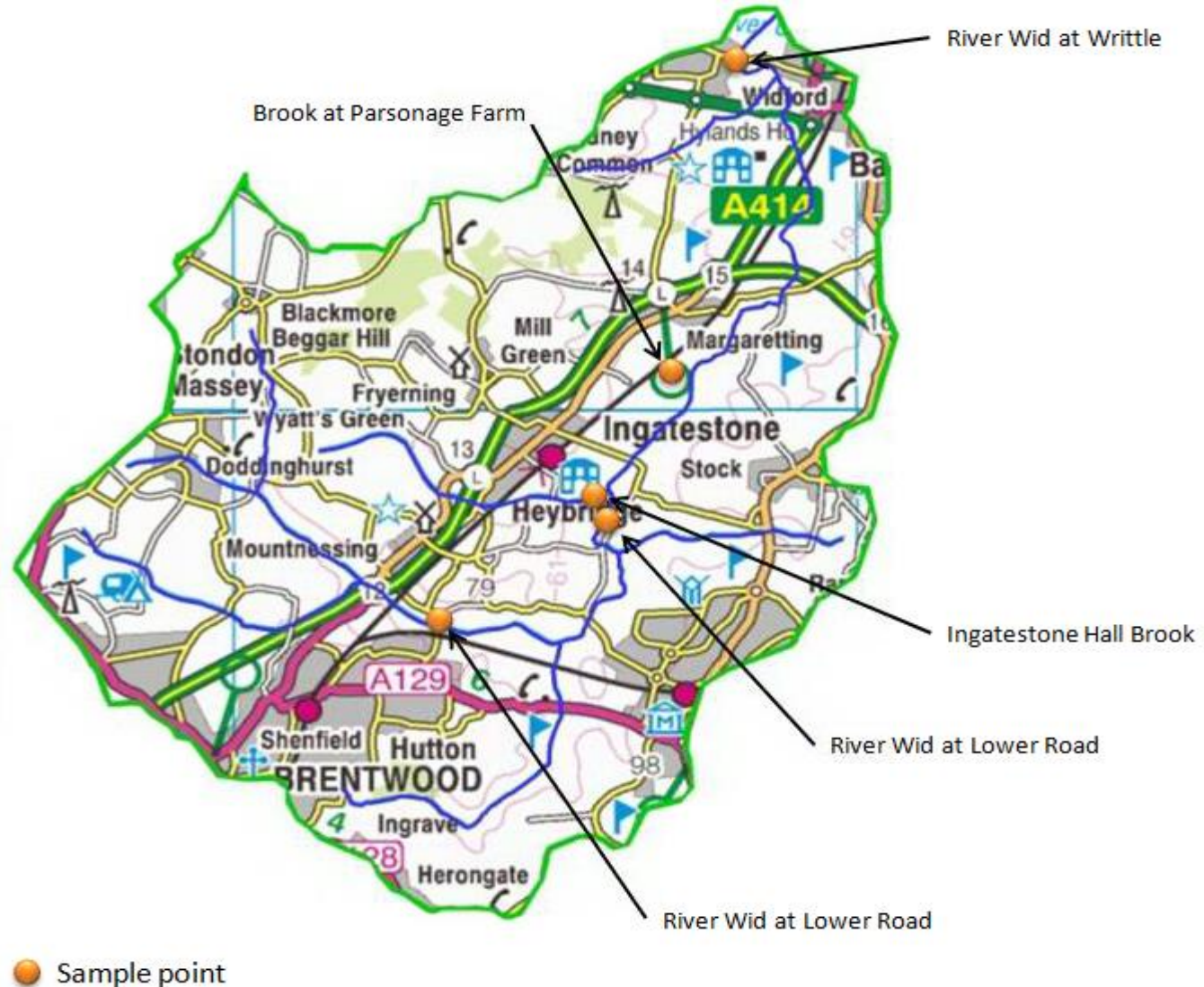


Farm visits to 83% of the catchment area.

Very positive response from farmers and their agronomists.

Water Quality Sampling

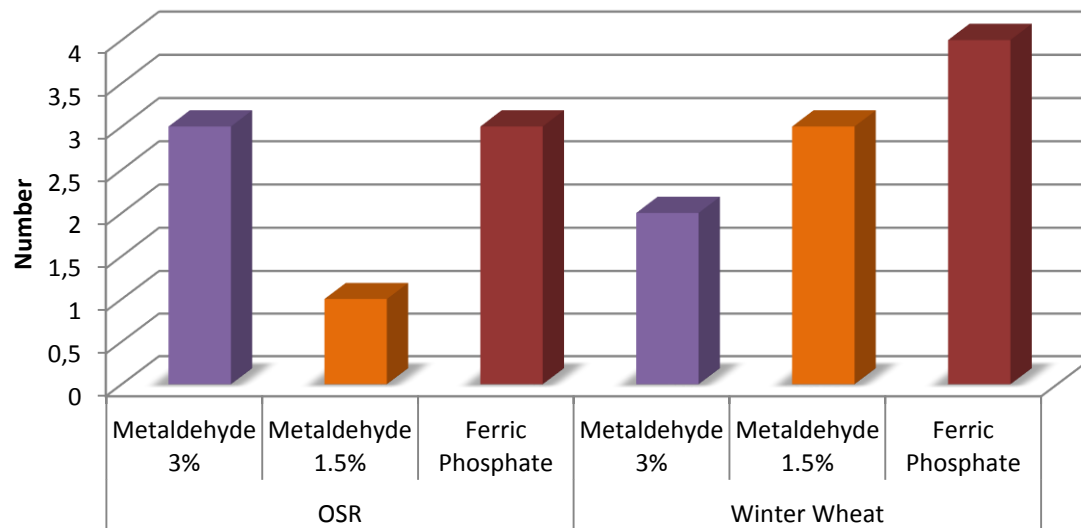
Additional monitoring of metaldehyde in the catchment:



Farmer Results

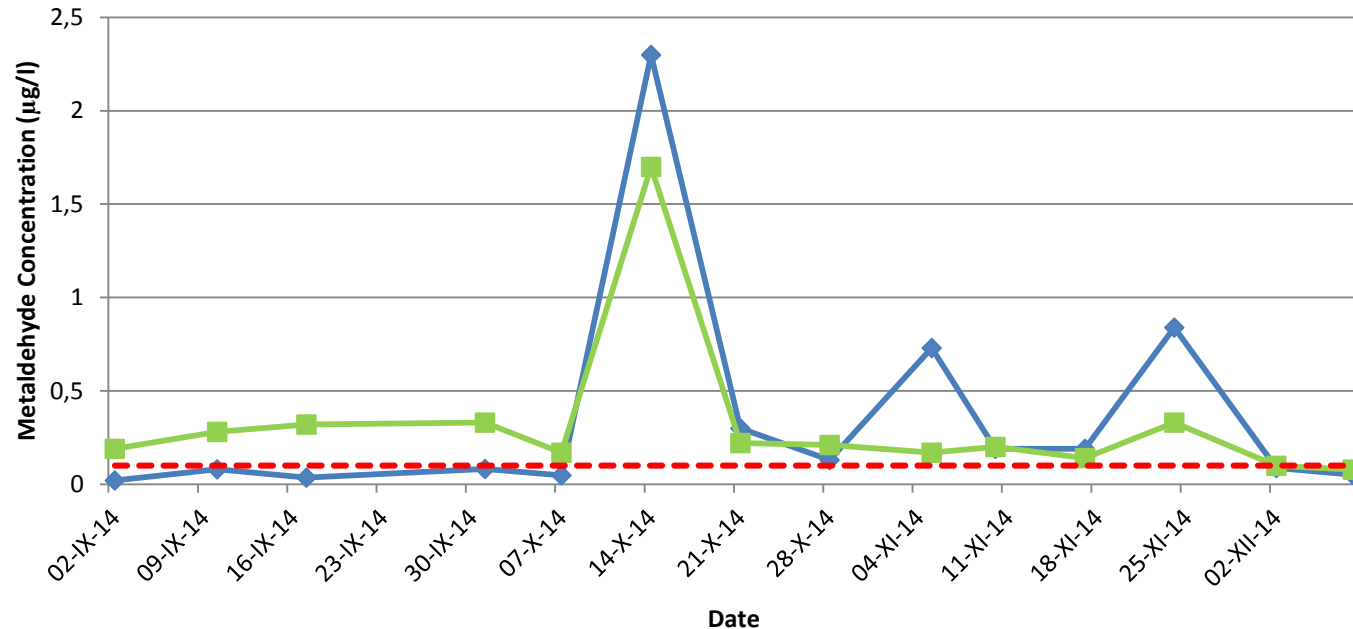
- Changes to practices including:
 - Seedbed consolidation
 - Operator training and machinery calibration
 - No incorporation of slug pellets with seed at drilling
 - Switch to a low dose or ferric phosphate pellet

Slug Pellet Use



Water Quality Results

- 79% improvement compared to the control catchment:



—◆— Wid —■— Can - - - EU Drinking Water Standard

River Wid Flooding on 14th October 2014



Water Quality Results

- Results comparable to a dry rainfall year of 2010:

	Year					
	2009	2010	2011	2012	2013	2014
No. of times sample >0.1 µg/l	10	7	2	11	10	7
% no. of times sample >0.1 µg/l	71%	50%	14%	78%	71%	50%
Average concentration (µg/l)	0.11	0.09	0.09	1.03	0.2	0.36

Recommendations

- One-to-one on-farm discussion and advice on a specific subject works
- Emphasise the importance of integrated pest management versus the prophylactic use of slug pellets
- Evidence based sampling
- Continued (and prior?) farmer engagement.



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Catchment Partnership

Any Questions?

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