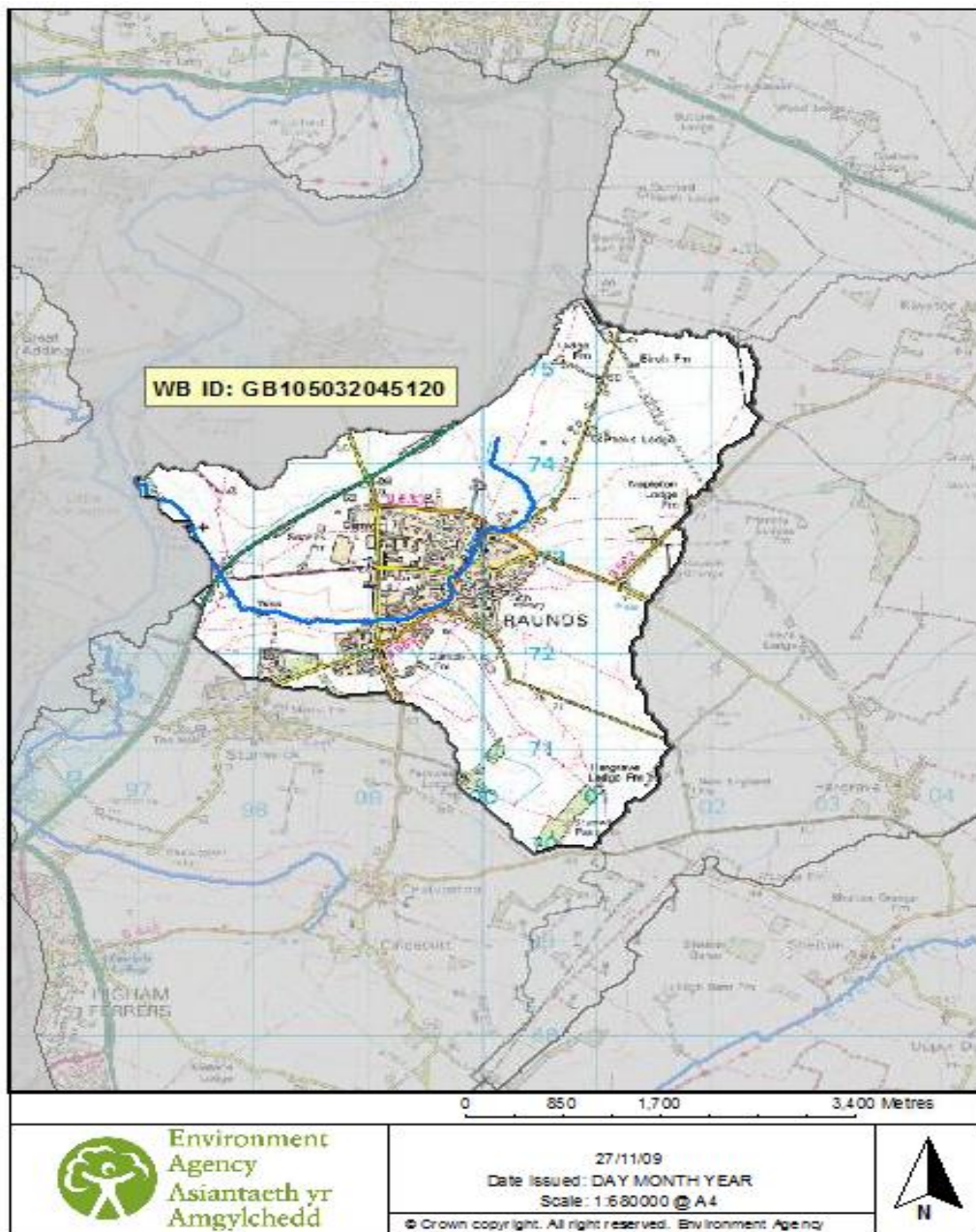




Hog Dyke – GB105032045120 Water Quality Bulletin



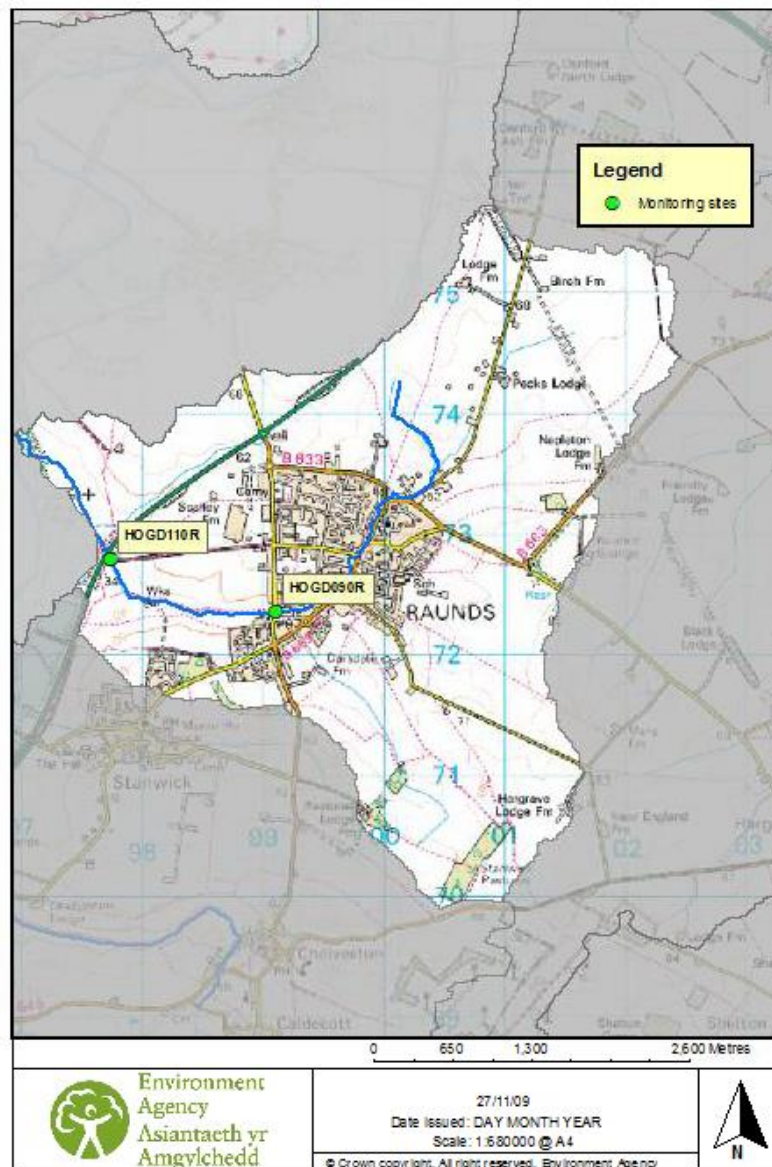
This bulletin provides a summary of the water quality data available and some of the key environmental features and issues for the Hog Dyke, from its source to the confluence with the river Nene.

The Catchment

The Hog Dyke is a tributary of the River Nene. The water catchment area for this watercourse is highlighted in the map above. This waterbody flows through the town of Raunds before joining the River Nene downstream from the Stanwick lakes. Land use in the catchment consists of the urban area of Raunds, whilst the majority of the area is comprised of agricultural land.

Current Status

The Hog Dyke was classified as at 'Poor' overall status under the Water Framework Directive (WFD). The WFD requires that all waterbodies meet Good Status/Potential by 2027. The WFD failure is due to high levels of phosphate and sedimentation issues. The failing WFD elements include invertebrates and phosphate which is classed as 'moderate', whereas macrophytes are at 'poor' status.

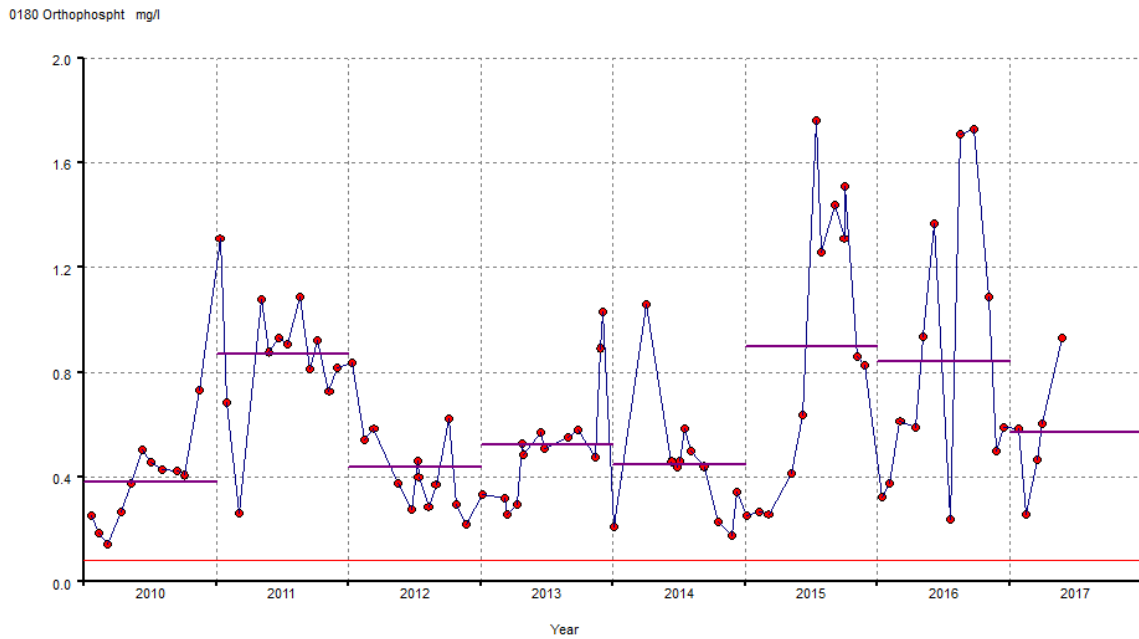




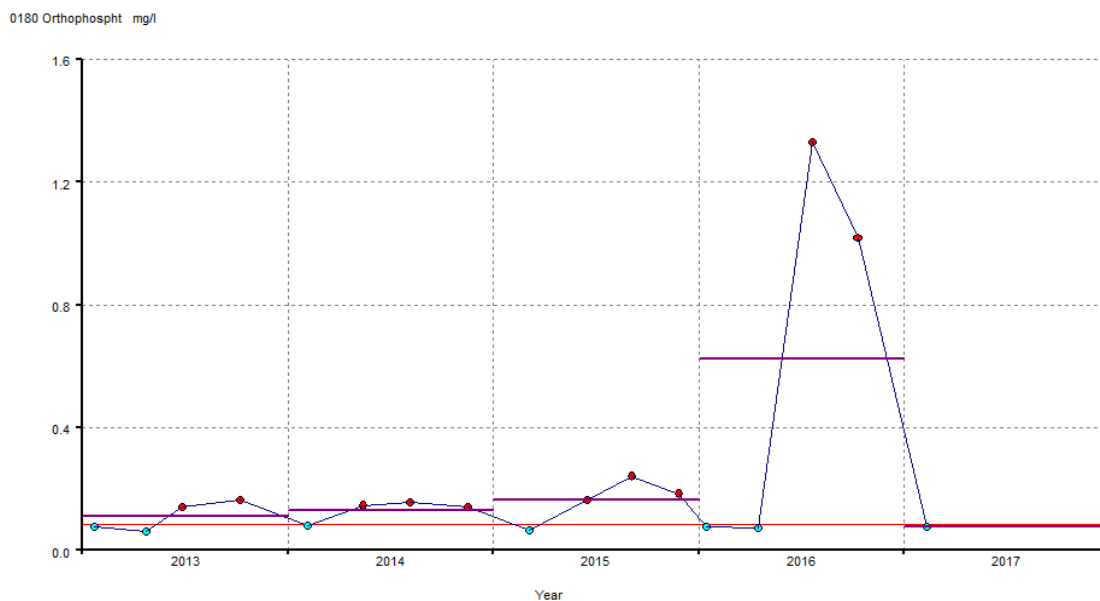
Phosphate

Phosphate is a common failing element under the WFD. The target for Good Status is calculated on a site-specific basis, which takes into account various physical characteristics of the monitoring site. The site specific limit for Good status is 0.085mg/L for HOGD090R and 0.081mg/L for HOGD110R. The time series plots below show that phosphate concentrations were higher than this limit on various occasions over the past few years. The purple line represents the average annual concentration, which has exceeded the Good limit in 2013 and 2015.

Time Series Plot - 0180 Orthophosphat mg/l
HOGD110R; HOG DYKE RAUNDS FM.BR.U/S A45 RD.BR. 19-01-2010 to 24-05-2017



Time Series Plot - 0180 Orthophosphat mg/l
HOGD090R; HOG DYKE RAUNDS A605 RD.BR. 22-01-2013 to 10-02-2017

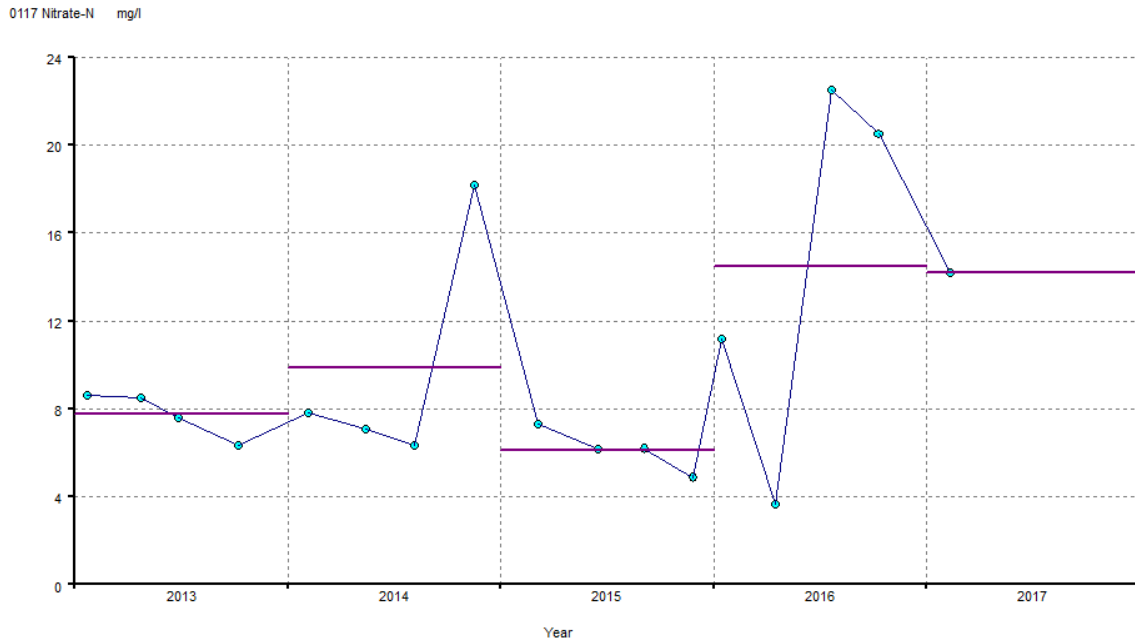




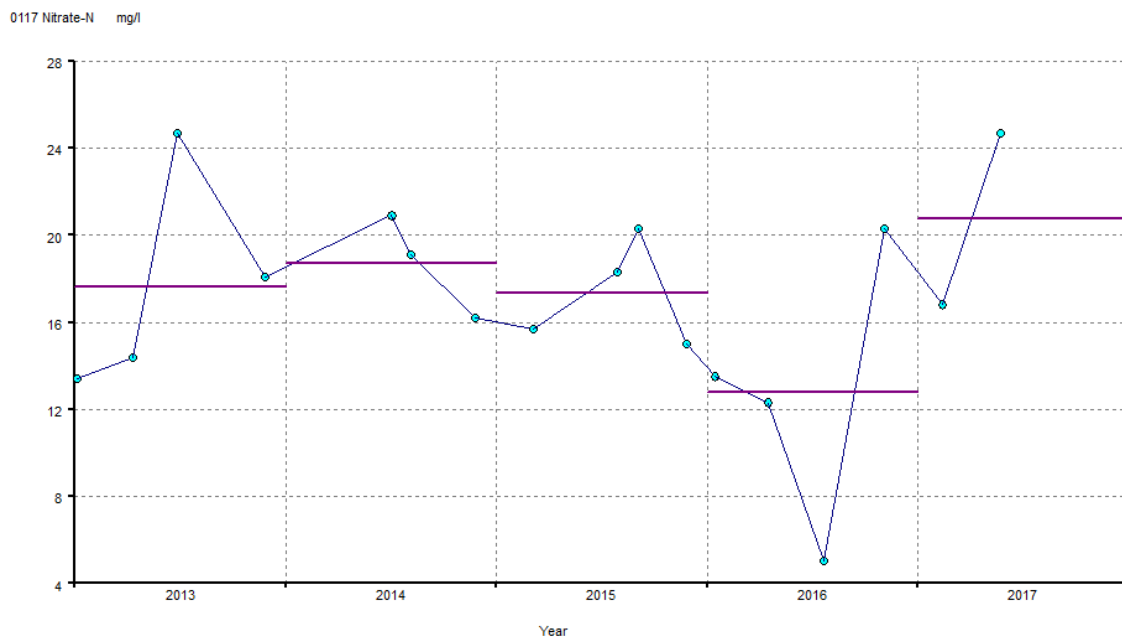
Nitrates

This catchment, along with much of the Lincolnshire & Northamptonshire area is in a Nitrate Vulnerable Zone (NVZ). Surface waters are considered to be polluted by nitrates when concentrations exceed 50mg/l.

Time Series Plot - 0117 Nitrate-N mg/l
HOGD090R; HOG DYKE RAUNDS A605 RD.BR. 22-01-2013 to 10-02-2017



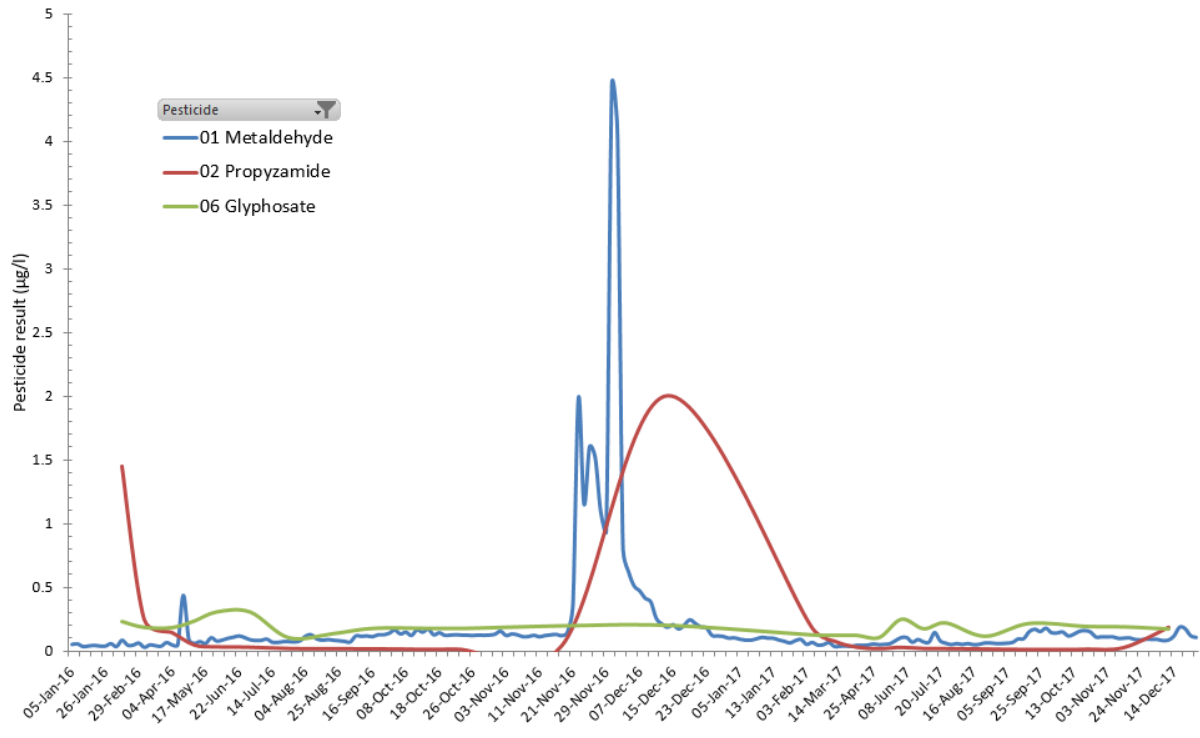
Time Series Plot - 0117 Nitrate-N mg/l
HOGD110R; HOG DYKE RAUNDS FM.BR.U/S A45 RD.BR. 04-01-2013 to 24-05-2017



Pesticides

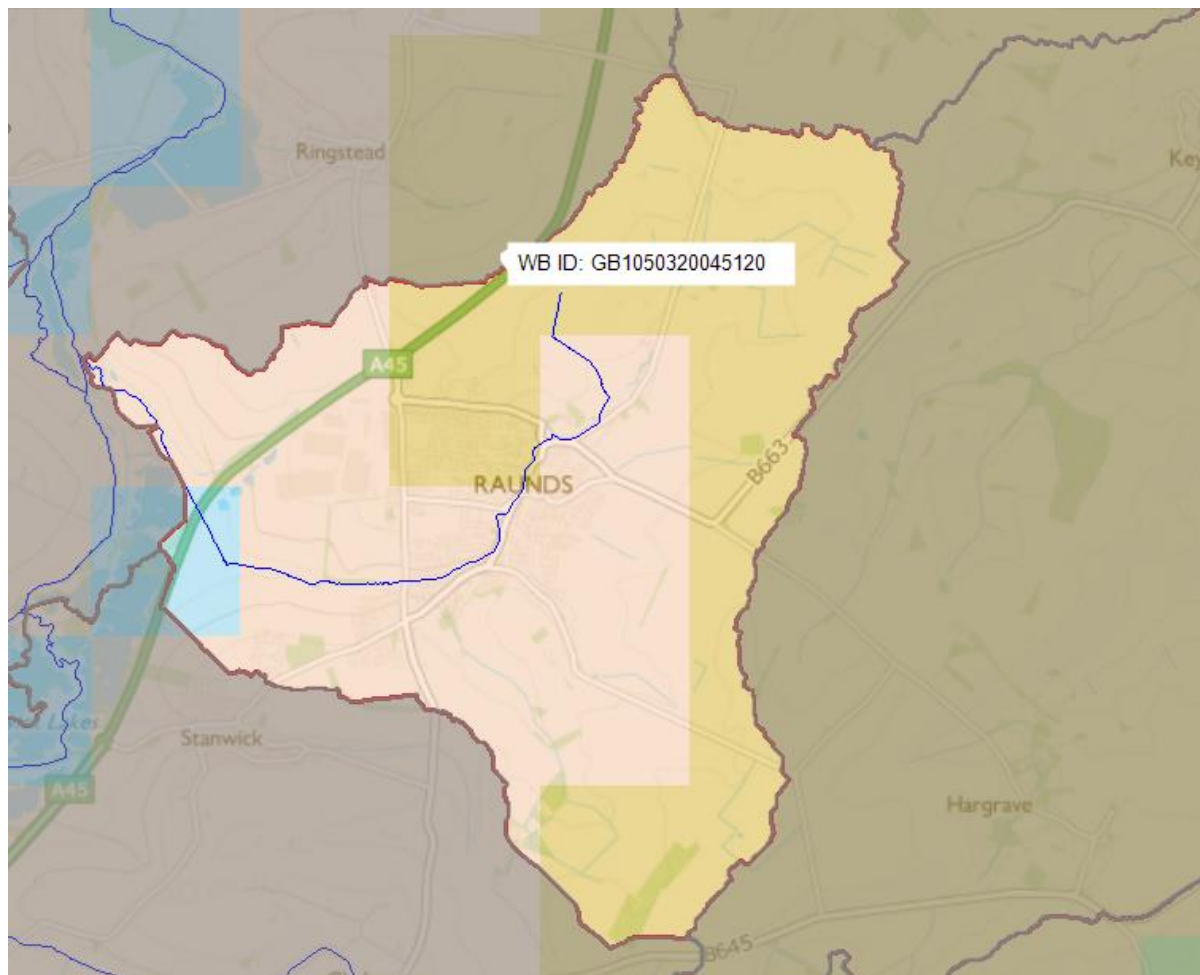
The drinking water limit for any pesticide is 0.1 µg/l. The Hog Dyke is within a drinking water protected area (SWSGZ1006), and the pressures that it faces includes pesticides such as metaldehyde, propyzamide and quinmerac.

Wansford Top Pesticides, 2016-2017



Soils

The map below shows the main soil types for the catchment area, and their leaching potential is described in the table below.



Soil Type	Colour	Description	Leaching Potential
Hanslope	Dark Yellow	Deep Clay	Intermediate
Moreton	Light Pink	Clayey over limestone	High

Groundwater

Nene Northampton Sands (GB40501G445400) and Nene Mid Lower Jurassic Unit (GB40502G402400) are the two groundwater bodies that underlie the Addington Brook catchment area. The former was classified at Poor status in 2016, whereas the latter is at Good status.

Other Information

This water quality bulletin was produced as part of CSF. More of these local catchment water quality bulletins can be found at:

<http://www.rivneneregionalpark.org/projects/catchment-sensitive-farming-csf>

Catchment Sensitive Farming (CSF)

This catchment is in a CSF area under the Welland and Nene Catchment Partnership. CSF aims to reduce diffuse pollution from agriculture. This means farmers in this catchment have access to free advice, workshops and training events to assist with soil, nutrient and pesticide management, as well as priority access to funding through the CSF Capital Grant Scheme.

To find out more contact:

Tel: 01536 526438

Email: kathryn@rnrp.org

Web: <http://www.rivneneregionalpark.org/projects/catchment-sensitive-farming-csf/>

For more information about water quality in your catchment, or to book a pollution prevention advisory visit please contact your local Environment Agency officer, Jo Gass, on

Tel: 07768 276779

Email: jo.gass@environment-agency.gov.uk

Campaign for the Farmed Environment (CFE)

The priority in Northamptonshire is surface water protection. The CSS options that contribute are:

- Buffer strips - to slow, filter and trap pollutants (soil, nutrients and pesticides)
- Cover crops - to reduce leaching of nutrients
- Field corners - to reduce overland flow and erosion of soil

To find out about free events or to get more information, contact your local CFE advisor Louise Richmond on 07713 333192 or louise.richmond@cfeonline.org.uk

Voluntary Initiative

Information regarding responsible pesticide use and how to keep them out of water can be found at:

<https://voluntaryinitiative.org.uk/water/advice/>

Metaldehyde Stewardship Group (MSG)

For more information on the MSG's campaign 'Get Pelletwise' please visit their website:

<https://www.getpelletwise.co.uk/>

Or for general enquiries they can also be contacted on: Tel. 0845 177 0117

In addition to best practice guidelines for farmers, the website offers advice on issues such as dose rates and machinery settings.

What's In Your Backyard? (WIYBY)

Check for Drinking Water Safeguard Zones (SgZs) and NVZs on the What's In Your Backyard (WIYBY) mapping system from the Environment Agency:

<https://environment-agency.cloud.esriuk.com/farmers/>

Magic Map

Magic Map is a useful mapping system which includes local designations, agri-environment schemes, geology, soils, landscape classifications etc. It also has aerial photography and other mapping functions. It is accessed via:

<https://magic.defra.gov.uk/MagicMap.aspx>

What can you do next?

If you would like to collect some of your own water quality data, arrange a free Catchment Sensitive Farming visit, or simply to discuss the issues further then please contact the Nene Catchment Partnership team at the RNRP offices (see CSF section for details).