

West Midlands State of the Environment

Agriculture and land management

Although the West Midlands is an important industrial region, agriculture accounts for nearly 75 per cent of land use. It is important to the national and regional economy and employs around 47,500 people in the West Midlands alone.

Land use influences the landscape and can lead to a variety of environmental impacts. Diffuse pollution is one such impact. It occurs when many small dispersed sources of pollution combine together to reach a higher concentration which then causes environmental harm. For example farmers apply relatively small amounts of fertiliser and pesticide to tracts of agricultural land. These substances may then drain into just a few watercourses where levels become more concentrated. Similarly in urban areas, pollutants can be carried into rivers by water running off from roads, roofs and car parks.

Soil contains the nutrients vital for food production and good soil structure is essential for productivity. It is estimated that nationally as much as 2.2 million tonnes of soil are lost from the land each year. It is important to try and reduce soil erosion to maintain the health of our soils, to maintain the carbon storage potential and to prevent other impacts from soil erosion such as flooding and the degradation of river habitats.

The agricultural sector, like most industries, produces emissions including greenhouse gases (GHG). In the UK, agriculture accounts for about seven per cent of total greenhouse gas emissions. It occurs mainly through nitrous oxide emissions from fertiliser and livestock-related methane.

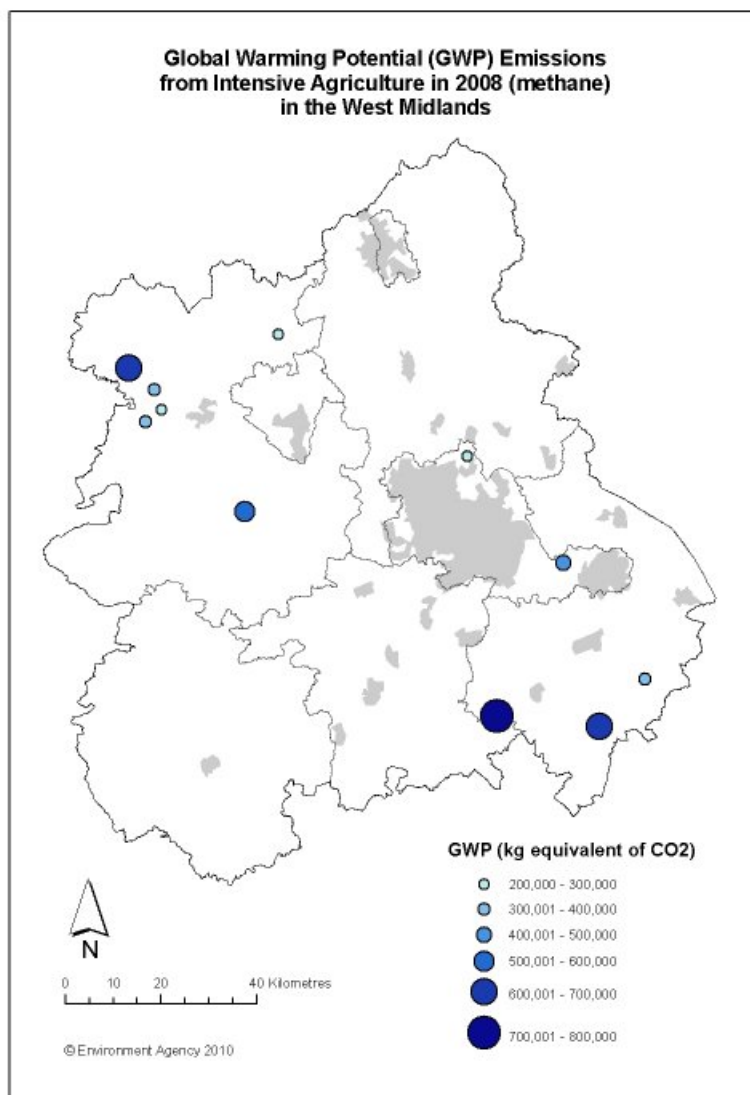
At a glance

- Over 960,000 hectares of land in the West Midlands is used for agriculture and there are more than 27,000 farms in the region. Nearly half of these are small farms with less than five hectares of land.
- Between 2000 and 2008 the number of farms rose by nearly 5,000 however figures for total employment on farms showed that only 250 more people were employed on farms over this time.
- More than half of the region's cattle and pig farming is located in Staffordshire and Shropshire. Herefordshire has the biggest share of region's poultry and sheep farming.
- Nearly three-quarters of the region's horticultural farming is located in Herefordshire and Worcestershire and nearly half of the region's arable crops are in Warwickshire and Shropshire.
- In 2008, 4,800 tonnes of methane were emitted in the West Midlands from intensive farming premises.
- In 2009 there were 110 pollution incidents (major, significant and minor) which were attributed to agricultural premises.

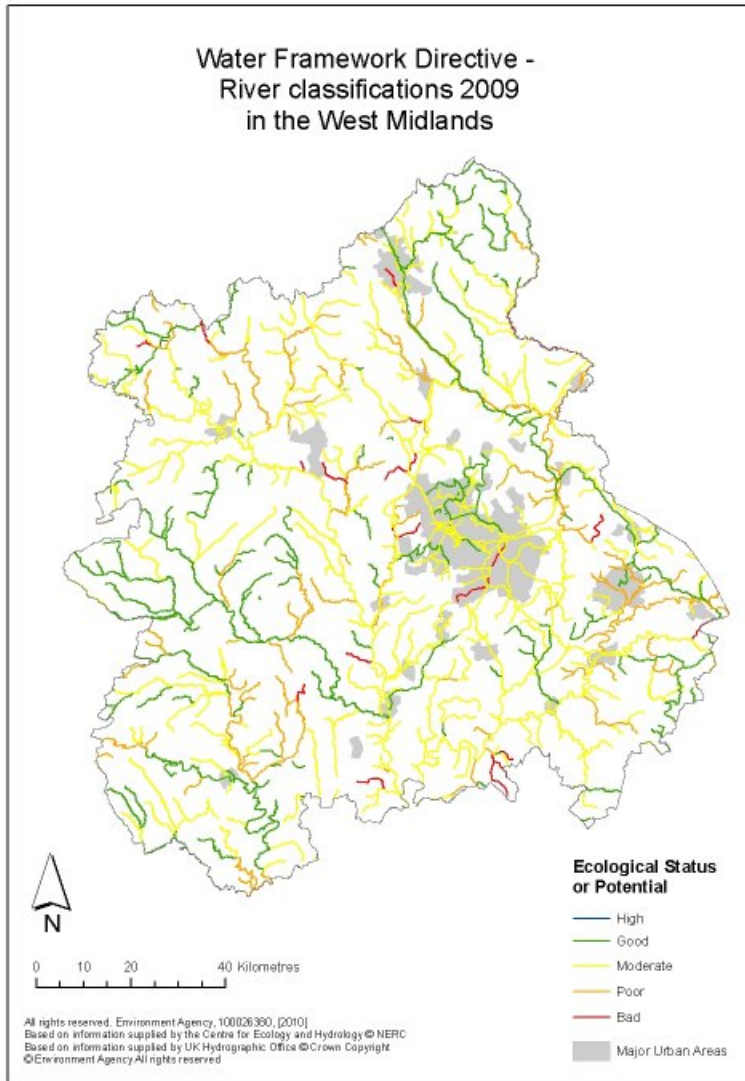
- As climate change occurs extreme weather events may become more frequent bringing more flooding to the region. This could affect the 6.5 per cent of agricultural land in the West Midlands which is at 'high' or 'moderate' flood risk.

Data and trends

The following map shows methane emissions from agricultural sites in 2008. Intensive agriculture sites which meet a set threshold are obliged to report their estimated annual emissions to the Environment Agency Pollution Inventory.



Water is essential to the health and wellbeing of people and the environment. We monitor rivers, lakes, canals and groundwaters to ensure they meet the European water quality standard of at least 'good' as set out under the Water Framework Directive. The following map shows the quality of surface waters in 2009. For more information on water quality see the 'Water' State of the Environment web pages.



customer service line

08708 506 506

www.environment-agency.gov.uk

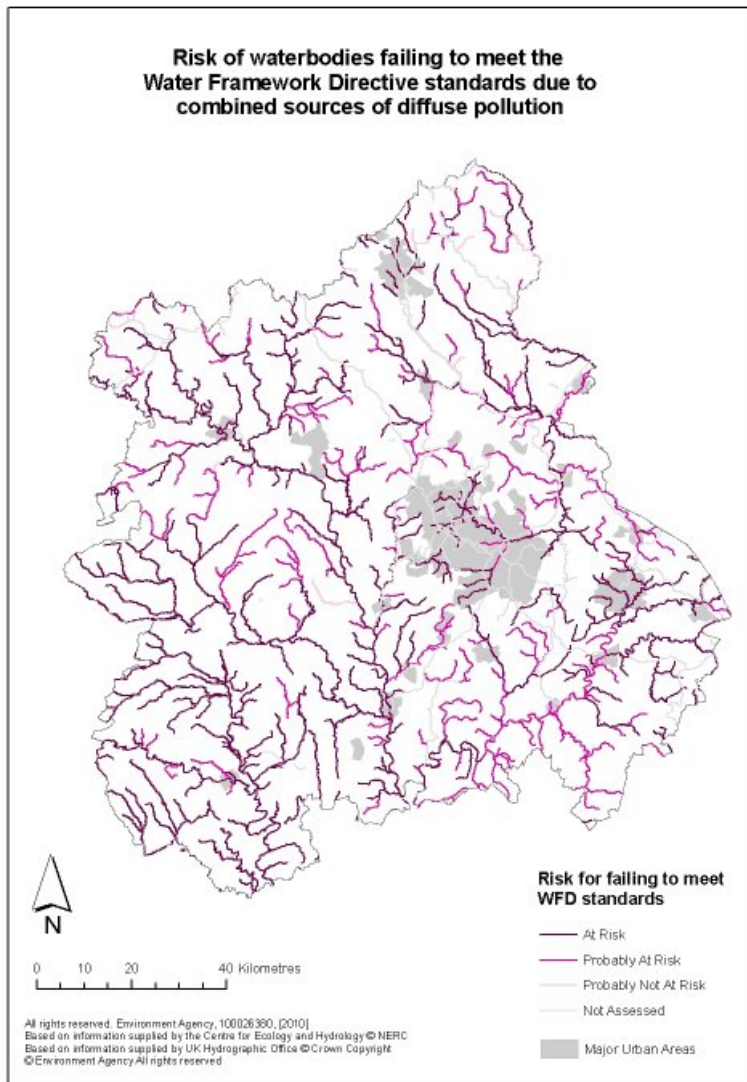
incident hotline

0800 80 70 60

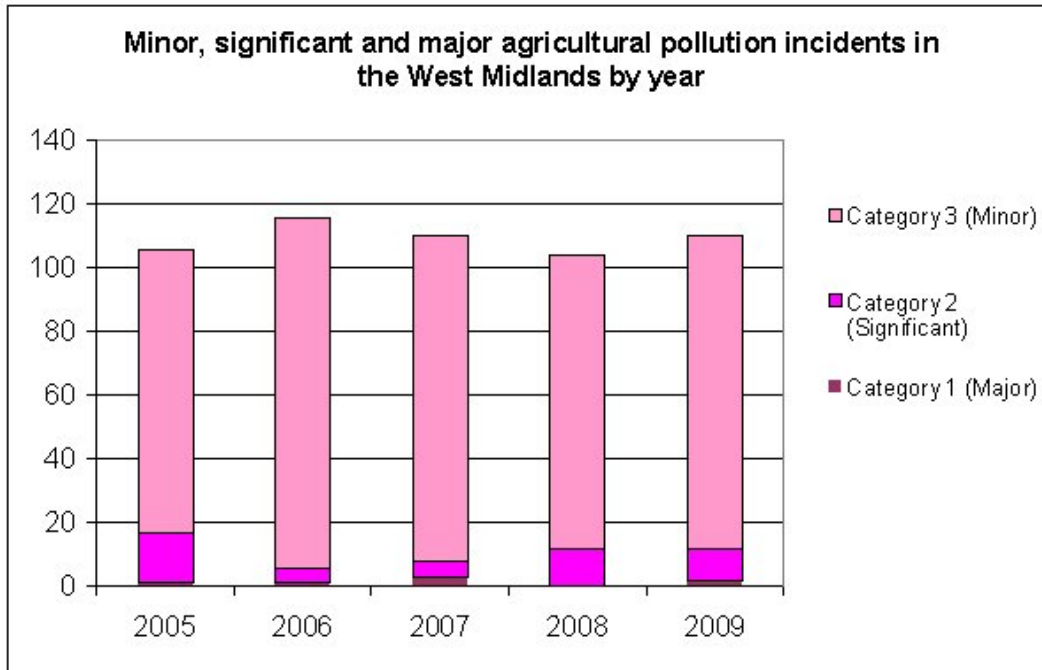
floodline

0845 988 1188

Diffuse pollution is one of the many pressures on water quality. Agricultural activity contributes to this type of pollution and the next map shows the likelihood that a given water body may fail to meet water quality standards because of diffuse pollution. We are currently working hard to ensure we understand exactly why each water body is failing to reach 'good' status and working with appropriate partners to improve the quality.



Pollution incidents are recorded onto our National Incidents Recording System. The seriousness of an incident is recorded according to its impact on the environment ranging from a major impact (category 1) to no discernable impact (category 4). The following chart shows the number of incidents (categories 1 to 3) that were attributed to the agricultural sector between 2005 and 2009.



Our role

We have an important role as regulator and advisor to those who manage the land. In the coming years we will:

- Work with land managers to reduce greenhouse gas emissions and increase resilience to climate change.
- Work with policy makers and land managers to ensure that soils are managed in a way that encourages carbon storage.
- Review and prioritise, with partners, opportunities for storing carbon in standing biomass, such as woodland.
- Target our agriculture and land management work to those areas where we can achieve maximum benefit for the water environment.

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