A clear solution for farmers
CATCHMENT SENSITIVE FARMING

# Priority Catchment Targeting Summary
# March 2011 – March 2014

**River Basin District: Severn** **Catchment: River Tern** **Total Area: 535 km²**

**Designations**

- **Surface Water Drinking Water Protected Area – whole catchment**
- **Surface Water Safeguard Zone – whole catchment**
- **Principal Aquifer & Groundwater Source Protection Zones – majority of catchment (nitrate)**
- **Groundwater Drinking Water Protected Area – whole catchment**
- **Groundwater Safeguard Zone (nitrate) – Bearstone borehole**

**Reasons for designation**
The Tern catchment is important for water resources, and is used to supply large quantities of the area's drinking water from both the river network and underlying groundwater stored within the Sherwood Sandstone aquifer. In addition a large number of a businesses and private dwellings also use the rivers, streams and groundwater for drinking water and crop irrigation.

The catchment geology, which is complex and influenced by past glaciations, results in groundwater being particularly vulnerable to diffuse pollution especially from nitrates. This is a particular problem in the Bearstone borehole area, which if not tackled successfully will require the addition of costly treatment facilities. The same geology also means that sediment and phosphate losses from agricultural land to surface and groundwater are a high risk.

River channel modification and maintenance to improve drainage has resulted in poor habitats and increased likelihood of sediment and nutrient inputs into surface waters. The majority of the catchment is classified as 'moderate' or 'poor' in terms of Ecological Status as defined by the Environment Agency. Monitoring points within the catchment show that many watercourses have high levels of nitrate, phosphate and pesticides.

The CSF objective is to protect drinking water sources from nitrate and pesticides and also to improve ecological status through reductions in nitrate, phosphorus and sediment.

**Priorities**

There are 5 sub catchments in the Tern target area. These are Bailey Brook, Ellerton Brook, Lonco Brook, River Tern between Coal Brook and Bailey Brook and the Bearstone borehole. The key priority is to protect the groundwater and surface drinking water areas from pollutants derived from agriculture: nitrates, pesticides (including metaldehyde) and phosphates.

**Objectives**

Catchment Sensitive Farming is working with farmers to try and reduce the amount of nutrients, pesticides and sediment entering watercourses.

In the River Tern catchment the aims of Catchment Sensitive Farming are:

- To advise farmers on appropriate changes in land management and the value of their soil to reduce the loss of sediment and soil-bound phosphate particles.
- To help farmers make better use of fertiliser, slurry and manure to increase nutrient efficiency. This will also reduce the amount of nutrients entering watercourses and water bodies.
- To improve knowledge of the impacts of pesticides (including metaldehyde) within the catchment and ways to reduce the inputs. Highlight use of alternatives to metaldehyde.
- To advise farmers on improvements to farm infrastructure. This helps to reduce nutrients and sediment entering water from farm yards, tracks and other areas.
  Farmers are encouraged to apply for the CSF Capital Grant Scheme if appropriate.
  The following capital items are included in the scheme: farm yard works for separation of clean and dirty water, roofing of manure storage and livestock gathering areas, roofs for slurry and silage stores and pesticide handling and biobed options.
- To encourage the use of suitable resource protection Entry Level Scheme options. The following options should be encouraged in the catchment for reducing water pollution: management of maize crops and in-field grass areas to reduce soil erosion and run off, maintenance of watercourse fencing, winter cover crops and permanent grassland with low or very low inputs.
  In addition to these, appropriately located buffer strips, wild bird seed and flower mixes, beetle banks and un-fertilized cereal headlands can all help to reduce water pollution from agriculture.

**Delivery**

Delivery will be concentrate on offering the following training to farmers in target areas –

- 1:1 visits offering soil sampling with nutrient management planning
- Slurry and manure sampling with nutrient management planning
- 1:1 visits for fertiliser spreader calibration
- 1:1 visits focusing on slurry storage
- 1:1 visits focusing on soil husbandry
- Pesticides training (NPTC PA1, PA2 and PA4S, plus pesticide handling 1-to-1's)
- CSFO visits to advise on Capital Grant Scheme
- Farm Infrastructure Audits
- Whole Farm Appraisals

Also farmers will be targeted for Environmental Stewardship (subject to budgets).

## Targeting Map