



South Staffs Water

Working together to
deliver a consistent supply
of high quality water



Our approach to
catchment management

Our approach to catchment management

At South Staffs Water we are committed to providing a consistent supply of high quality water to all of our customers, now and for future generations.

Our water supply is taken from both groundwater (boreholes) and surface water sources (rivers). The quality of this water is affected by every activity which takes place on the land and in rivers which make up the catchment area we take water from.

A catchment is an area where water is collected by the natural landscape. In a catchment, all rain and run-off water eventually flows to a stream, river, lake, ocean, or into a groundwater system.

Agriculture, forestry, industry, waste management and water abstraction practices all have an impact on the environment and on the quality of the water resources within it.

What's the quality of raw water like in the South Staffs region?

The quality of raw water in the South Staffs region is generally very good; however, there are two substances which have an impact on our water supplies:

Nitrates:

Nitrogen is an essential nutrient for plant growth and is regularly applied to agricultural land as nitrate in fertilisers.

Agricultural fertilisers can leach into groundwater and run-off into surface water creating water quality issues.

Over the last 30 years levels of nitrates in the raw water supply have been increasing to a point where some levels exceed the drinking water standard for nitrates. Historically our approach has been to 'blend' water from different sources. This involves mixing water with higher concentrations of nitrate with water which has lower concentrations, to ensure all water meets the required standards. Where this is not possible we have to treat the water at special nitrate treatment plants.

Regulation

Water quality - We have a regulatory duty to ensure the water supplied to our customers meets the requirements of the Water Supply, Water Quality Regulations 2010.

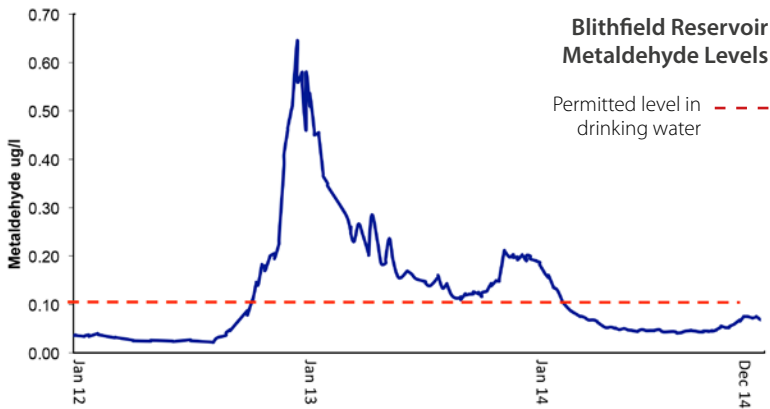
Environment - We are obliged to assess the impact of our operations on environmentally sensitive sites and ensure we meet statutory obligations included within the Water Framework Directive, Countryside and Rights of Way Act, Eel Regulations and Biodiversity 2020.

Metaldehyde:

Metaldehyde is the active ingredient in the majority of slug pellets used by farmers and gardeners.

Metaldehyde can be washed into watercourses during periods of high rainfall. In some instances we've detected concentration levels above the 0.1 micrograms per litre (0.1 µg/l) drinking water standard for pesticides. While this is not a health based standard, it is a legal requirement that must be met.

As there is no effective treatment to remove metaldehyde at present, we're aiming towards management of the catchment to tackle the problem at source.



What are our long term goals?

Treating water is not cost effective or environmentally sustainable.

In addition to chemicals which we may have to use, our treatment works require maintenance and have operating costs which increase our carbon footprint.

A sensible approach is to ensure we do all we can to take care of the environment – this is known as catchment management.

We aim to:

- Improve the quality of water in rivers and lakes which we abstract from
- Prevent further deterioration of raw water quality
- Improve biodiversity
- Gain a broader understanding of catchment management principles and improve land management practices

How are we going to achieve this?

Collaborate

We believe that working together and understanding the needs of others is the best way to create effective catchment management solutions. We want to specifically work with:

- Landowners, farmers and farm advisors – to understand local farming practices and constraints
- Land users and local communities – to gain a better understanding about land use for commercial and recreational activities
- Stakeholders and regulators, such as the Environment Agency, Natural England, Drinking Water Inspectorate, Staffordshire Wildlife Trust and River Trusts - to develop partnerships and gain maximum environmental benefit from our approach
- Other water companies - to develop framework agreements and share information and resources

Research

We will carry out research on our catchments to better understand how they operate. Specifically we will:

- Use data to map and model the presence of agrichemicals in the water environment and share this information with our stakeholders to enable them to take informed actions.
- Gain a better understanding of the quality of the water

Take action

Working with others we will take positive steps to improve the quality of water in our catchments. We will:

- Actively participate in existing voluntary initiatives to encourage catchment friendly use of agrochemicals
- Support incentive schemes to encourage the use of alternative agrochemicals
- Undertake schemes which seek to enhance biodiversity
- Support and offer sponsorship for farming events to promote catchment sensitive farming

Educate

Informing people about the impact of catchment management is an important way of raising awareness. We will:

- Organise awareness events, including visits to our treatment works and reservoirs
- Develop our educational resources to raise awareness of the importance of catchment management
- Make our sites available for other organisations to use in raising awareness of catchment management
- Promote catchment management and its aims through the local press and community publications

Blithfield Reservoir

Blithfield Reservoir is a beautiful 790 acre lake which sits within a 2,350 acre estate owned by South Staffs Water. The estate is a haven for wildlife and is a centre for recreational activities, including walking, fishing and sailing. The site is also designated as a Site of Special Scientific Interest, due to its national importance as a wildfowl habitat.

The reservoir was created in the 1950s by building a dam across the nearby River Blithe and channeling water into the valley alongside. Today it provides 70 million litres of water each day to more than half a million houses and businesses in East and South Staffordshire and South Derbyshire.

The supply of water to Blithfield Reservoir is via a discreet catchment making it easier to monitor the effects of catchment management activities.

To improve the quality of water within the catchment and enhance the environmental status of the area we are:

- Working with landowners to improve water quality
- Managing the land to improve habitats and increase biodiversity
- Developing the existing SSSI programme by increasing land under environmental stewardship
- Maintaining recreational use including fishing, bird watching, rambling and sailing
- Developing existing educational facilities to engage with the wider community

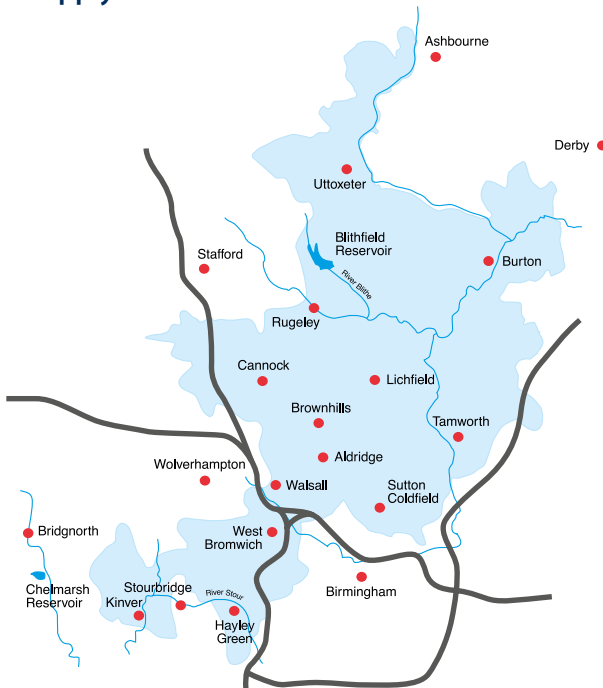


What we hope to achieve

Our short term objectives are to identify and 'get to know' our local farming community and build relationships to understand local farming and land management practices and constraints.

Longer term we aim to reduce the need to build additional treatment facilities at our treatment works and improve the reliability and availability of water resources in the local area. We want to improve biodiversity and help to maintain a stable ecological environment for future generations.

Our area of supply



Useful links

Voluntary initiatives

www.voluntaryinitiative.org.uk/en/home

Catchment sensitive farming

www.gov.uk/catchment-sensitive-farming-reduce-agricultural-water-pollution

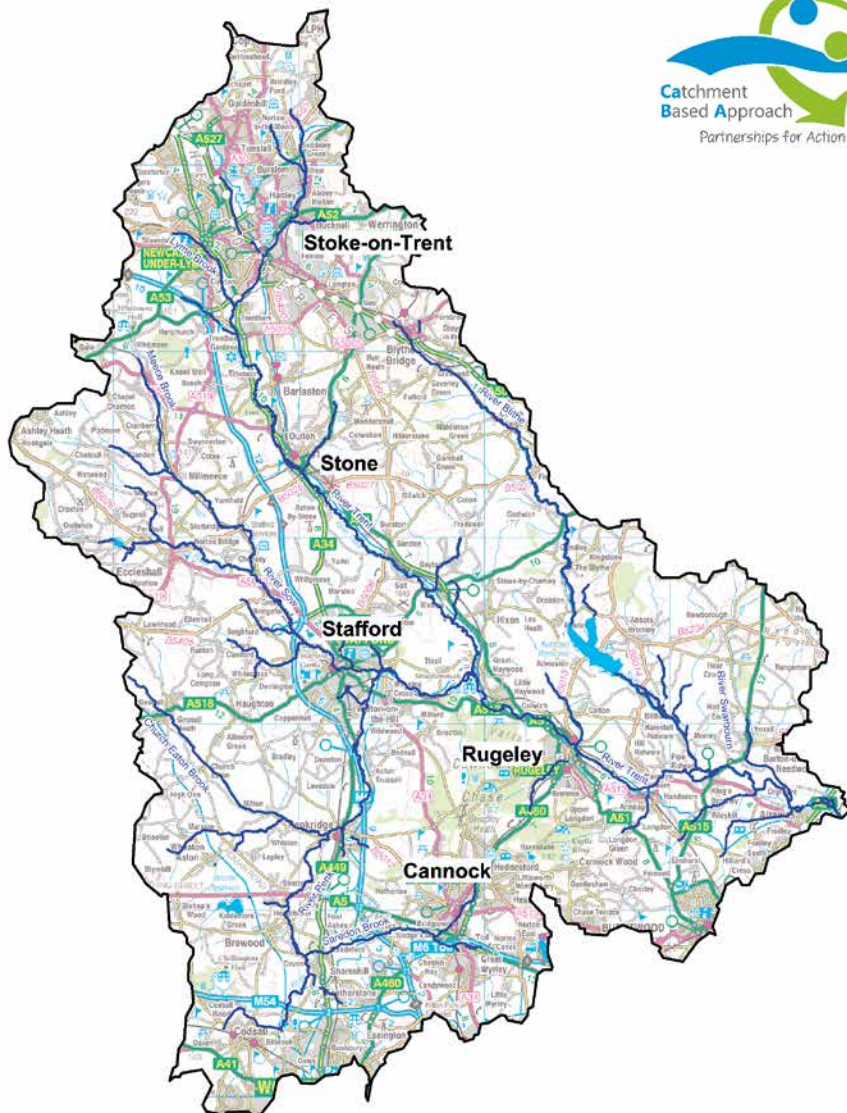
Further information

www.south-staffs-water.co.uk/environment/managing-water-resources/catchment-management

Email: catchment.management@south-staffs-water.co.uk

Telephone: 01922 638282 extension 2350

Staffordshire Trent Valley Catchment



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