# **Affinity Water**

# LPA Engagement Programme – Guidance Notes

**Planning Application consultation** 

February 2025



#### Introduction

We want to ensure that we are providing the best possible support that we can to LPAs on both planning policy and development management matters. To facilitate this, we are updating and improving the way we deal with all planning matters, with a focus on communication and building relationships with all LPAs within our supply area.

Our engagement programme will cover four key topic areas being;

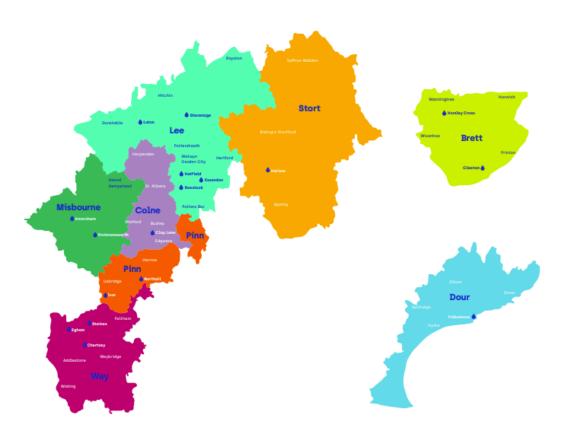
- How we plan for water
- How we manage water supply
- How we protect the environment
- How we manage contamination

To capture these topics will be releasing a series of guidance notes regarding planning matters that are relevant to the business.

In this guidance note, the types of planning applications that we should be consulted on are outlined.

We have a responsibility to ensure we provide safe drinking water to all our customers and ensure the future sustainability of water resources in the region. An important element of this is planning for future developments and responding effectively to planning applications, with an emphasis on water resource protection. To ensure we can deliver it is essential planning applications identified in this document are referred to Affinity Water for technical review.

#### Our supply area

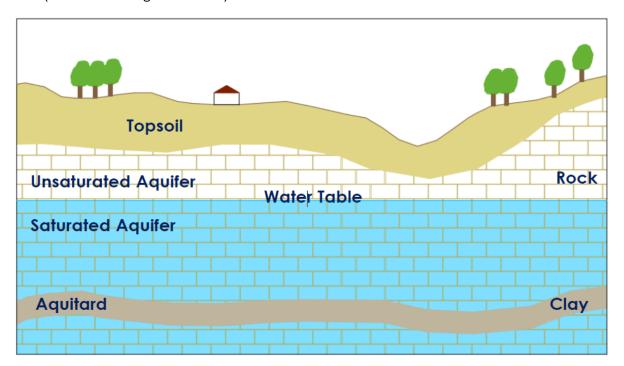


#### **Groundwater overview**

It is essential for our groundwater sources to remain unharmed to continue the supply of clean water to our customers. On average 65% of the water we supply is abstracted from chalk groundwater sources. This water is generally clean due to the natural filtration through sediments and rocks therefore requiring typically minimal treatment.

#### What is an aquifer?

An aquifer is a mass of rock or sediment able hold and transmit groundwater. The aquifer, dependent on water table level, can have an unsaturated zone (dry rock) above the water table and a saturated zone (rock filled with groundwater) below the water table.



#### What is chalk?

The chalk represents the most important aquifer in the UK. Across Affinity Water's supply area there are 10% of the world's rare, environmentally vulnerable chalk streams

Chalk is a form of limestone composed of the remains of shells or tiny marine organisms (plankton) such as foraminifera and coccoliths, all packed together over millions of years. By definition, Limestones are a sedimentary rock composed of calcium carbonate or dolomite. Calcium carbonate can be dissolved by slightly acidic surface waters or rainwaters and therefore dissolution features or karsts can develop.

It is due to the presence of interconnected fractures and karstic nature of the Chalk that make it very vulnerable to contamination.

#### How we abstract groundwater from the aquifer

Boreholes and wells are used to abstract groundwater. The boreholes are made of a metal plain casing pipe reaching down to 20-30m below ground, the borehole beyond that remains an open hole with the structure of the chalk keeping it open. The boreholes house a submersible pump and rising main that brings the water up to ground level.

There are 368 boreholes across our region, 224 in operation. Each of our boreholes are protected by Source Protection Zones defined by the Environment Agency.

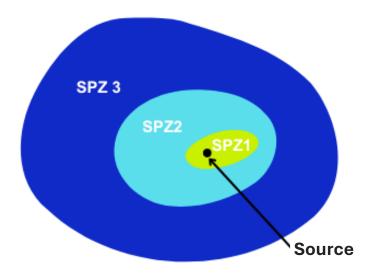
#### Source Protection Zones (SPZs)

The Environmental Agency (EA) have defined SPZs as zones which show the level of risk to the source from contamination. Sources include wells, boreholes and springs, all valuable assets of Affinity Water.

Contamination of these sources can compromise the quality of drinking water that we can supply. It is essential that we manage the risk to groundwater supplies from potential polluting activities to ensure our supply is not impacted.

There are three zones defined by the EA. The first two zones are based on the travel time of potential pollutants to the source. SPZ3 represents the recharge area.

	Travel time	Minimum radius
SPZ1	50 days	50m
SPZ2	400 days	250m -500m



The EAs groundwater SPZs are available to view and can be accessed through DEFRA's Magic Map; <a href="https://magic.defra.gov.uk/MagicMap.aspx">https://magic.defra.gov.uk/MagicMap.aspx</a>.

To find the SPZs, from the table of contents on the left-hand side, select in this order: designations, land-based designations, non-statutory, source protection zones merged (England) – tick the box.

# **Applications within SPZs**

#### When to consult us

It is important when LPAs identify a development within a SPZ1 or SPZ2, we, as the water provider, are consulted. To provide clarity on specific developments that are of particular interest we have put together the following list for guidance;

- Cemeteries
- Changes of use from or to a Part B use class as detailed in the Town and Country Planning (Use Classes) Order 1987
- Data centres
- Developments proposing to use soakaway drainage within or near to SPZ1
- Discharge of condition applications where we have recommended a condition
- EIA development and associated screening/scoping opinions
- Fuel storage (including petrol stations and oil depots)
- Identified or potential contaminated land / brownfield sites where a previous use is likely to have caused contamination
- Incinerators, anaerobic digestion plants and other waste facilities

- Lagoons and cess pools
- Large scale single developments (such as supermarkets, schools and warehouses)
- Large scale developments with potential to involve piling (such as multi-storey buildings)
- Mineral extraction of any kind (including quarries)
- Other facilities handling or processing commercial, domestic or agricultural waste
- Research centres
- Residential developments with 10 or more units <u>or</u> where the development intersects significant Affinity Water infrastructure
- Storage of manure, slurry, sewage sludge and other waste
- Transport infrastructure
- Underground tunnels and pipelines

### **Applications outside of SPZs**

Some developments are of particular interest to us regardless of their location within our supply area, due to their increased potential risks and impacts to our water resources, assets and / or infrastructure. Large developments can also result in substantial increases in water demand, with new or upgraded connections being required in some cases.

Within our supply area, please consult us on any planning applications which meet any of the following criteria:

- Residential developments with more than 50 units
- Commercial developments with a site area of more than 1 Hectare
- Data centres
- Environmental Impact Assessment (EIA) development and associated screening/scoping opinions
- Mineral extraction of any kind (including quarries)
- Identified or potential contaminated land / brownfield sites where a previous use is likely to have caused contamination

 Discharge of condition applications where we have recommended any conditions within our response to the original application

# **Applications on Contaminated Land**

Identifying contaminated land prior to development is essential to maintain a clean water supply for all our customers. Without appropriate precautions, construction activities can enable mobilisation of any contaminants trapped in the unsaturated zone. Exposure to rainfall and drainage movements can cause infiltration into the ground. There are typically three sources of pollution from construction sites which can impact on watercourses;

- Silt pollution
- Release of hydrocarbons or chemicals
- Release of litter or building materials into the water

To manage these pollution risks effectively, we request that any proposed development on identified contaminated land be referred to Affinity Water for a technical review.

Our assessment will look at the potential mobilisation of contaminants in our water supply. Additional documents and information may be required to complete an adequate review. If the contamination management is not adequate conditions may be attached to the planning application which will need to be discharged before the completion of the development.

#### **Contact us**

We encourage you to get in contact with us if you have any questions regarding this guidance note. Questions can be sent to <a href="mailto:planning@affinitywater.co.uk">planning@affinitywater.co.uk</a> or <a href="mailto:amy.pryor@affinitywater.co.uk">amy.pryor@affinitywater.co.uk</a>. Please also let us know if any further guidance documents would be useful to you.

As part of our engagement programme, we are focused on building relationships with all Planning Authorities within our supply area. We are open to meeting with you to discuss our work as well as local planning matters we can assist with. Please contact the above email to arrange.