

# WATER IN BUXTON

## SUPPLEMENTARY PLANNING DOCUMENT

ADOPTED DECEMBER 2021



**High Peak Borough Council**  
*working for our community*

# High Peak Borough Council

## Water in Buxton Supplementary Planning Document

**Adopted December 2021**



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# 1. Introduction

## 1.1 Overview

- 1.1.1 Water is a vital resource that the planning system plays a key role in managing. The need to protect Buxton's water resources and water quality is embedded within the adopted High Peak Local Plan (the Local Plan) policies *EQ1: Climate Change* and *S7: Buxton Sub-area Strategy*.<sup>1</sup> The policies recognise the need to protect the supply and quality of mineral waters in Buxton – as a significant contributor to the economy of the area – and to ensure water efficiency measures are implemented to avoid negative ecological effects on the River Wye.
- 1.1.2 This Supplementary Planning Document (SPD) expands on the Local Plan policies and provides further guidance to ensure that development preserves the quality of water resources within the Buxton Sub-area and supports water efficiency. The SPD forms part of High Peak Borough Council's suite of planning documents and provides guidance to developers, landowners and members of the public to raise awareness of the vital importance of water sources and to enable them to meet the requirements of the Local Plan when preparing development proposals and submitting planning applications.
- 1.1.3 This guidance therefore addresses two separate purposes within the common theme of water quality in Buxton. It:
- Supports the protection of mineral water sources within the Buxton Sub-area; and
  - Supports effective management of water to improve overall water quality and prevent additional phosphates reaching the River Wye, supporting a reduction in phosphate load where possible.
- 1.1.4 This document was adopted by the Council on 9 December 2021. It is a material consideration when considering planning applications or planning appeals. This SPD does not introduce new policy but adds further detail to the policies within the Local Plan, specifically policies EQ1 and S7.

## 1.2 Background

### The need to protect mineral water sources in Buxton

- 1.2.1 Buxton is an area with a number of mineral water springs, one of which is a nationally unique potable thermal mineral water of national importance, Buxton thermal waters. These waters have been used since Roman times and Buxton developed as a spa town during the 18<sup>th</sup> and 19<sup>th</sup> century as many visitors were drawn to the town's thermal spring. Buxton's Georgian prosperity is evidenced by many of the buildings and pleasure gardens that still define the character of the town today. One of the most important buildings is The Crescent, constructed in 1780 as part of the Duke of Devonshire's plans to establish a fashionable spa town. The building is Grade 1 listed.
- 1.2.2 Today, the thermal water is bottled by Nestlé UK as *Buxton Water*, which is one of the best known natural mineral water brands in the UK. Their bottling plant, located in Waterswallows near Buxton, brings employment and prosperity to the town as well as income to the Council as owner of the spring. The Crescent buildings have been recently renovated and restored for use as a Spa Hotel,

<sup>1</sup> The High Peak Local Plan was adopted in April 2016. Available via: <https://www.highpeak.gov.uk/article/646/The-Adopted-Local-Plan-2016.Policy-S7-applies-to-the-Buxton-Sub-Area-as-defined-on-the-Policies-Map> - <https://www.highpeak.gov.uk/article/2223/Interactive-local-plan-map>

which also uses the thermal water, in this case for bathing and spa treatments. The Crescent redevelopment is expected to play an important role in the regeneration of the town.

- 1.2.3 Another mineral water source relatively recently discovered is Rockhead spring located just outside Buxton near Cowdale. This is licenced and used for bottled water production.
- 1.2.4 Therefore, water quality or flow impacts to the Buxton mineral waters could be irreparable and cause significant economic damage to the town of Buxton and nationally.
- 1.2.5 EU legislation and its transposition into regulations for England and Wales<sup>2</sup> require that natural mineral waters to be used as bottled water are subject to specific requirements, for example, that they must be drawn from a specified source which is protected from pollution and that the water can only be treated to remove certain naturally-occurring elements before bottling.
- 1.2.6 It is therefore vital that the water quality is protected and that the objectives of the policies in the Local Plan are met.

### The type of sources, location of sources and how the water arrives at those locations

- 1.2.7 Thermal springs are rare in Britain. The Buxton Thermal Springs have been used since Roman times and have a long history of use as a mineral water and spa. They consist of a series of springs that discharge at temperatures up to 27.5<sup>0</sup>C through Carboniferous Limestone in the vicinity of The Crescent in Buxton. The location of the springs suggests that the thermal water is capped beneath younger strata (shales and sandstones) that exist to the north of The Crescent. The thermal water emerges at the ground surface where the younger rocks are thin or absent.
- 1.2.8 The thermal water is unpolluted and has unique chemical characteristics that distinguish it from the non-thermal groundwater. The thermal springs are understood to originate from the percolation of rainfall into a network of micro-fractures in the Carboniferous Limestone to reach a depth greater than 900m. The heated water then returns to the surface, probably following geological faults in the limestone strata, a process that takes some 5,000 years.
- 1.2.9 Although the thermal water has a greater hydraulic head than the cold groundwater system, there is a delicate balance between the cold and thermal groundwater systems and the precise route of the waters though the limestone is not entirely known. There is therefore a need to avoid disturbing established flow pathways within the limestone in and around the Crescent. Excavations, borehole drilling and piling have the potential to disturb groundwater flow pathways. The construction works associated with creating an excavation or borehole also have the potential to cause contamination of the groundwaters, reducing groundwater quality and affecting their unique chemical characteristics.
- 1.2.10 Rockhead Spring was recognised as a Natural Mineral Water in 2000. The water is percolated through the Carboniferous Limestone similar to the thermal waters but it is not a thermal water and is different in composition to the thermal waters at Buxton. Like the thermal waters, the groundwater flow pathways through the Carboniferous Limestone are not precisely known. Any excavations or building in the area around Rockhead Spring needs to consider the risk of disturbance or contamination to pathways through the limestone that the water moves through.

### The need to manage phosphate levels in the River Wye and the impact of new homes in Buxton

- 1.2.11 Phosphate is a naturally occurring nutrient and essential for plant and animal growth but it can have harmful effects on the ecology of rivers through a process called 'eutrophication' where there

<sup>2</sup> The Natural Mineral Water, Spring Water and Bottle Drinking Water (England) (Amendment) Regulations 2018.



is an increase in mineral and organic nutrients. This process changes algae formation that can lead to a reduction in dissolved oxygen and deterioration in conditions that affect the suitability of the habitat for certain species. For the River Wye the species affected are White-clawed crayfish, Brook lamprey and Bullhead.

- 1.2.12 There are two principal anthropogenic sources of phosphorus in the River Wye: effluent discharges from sewage treatment works, and diffuse phosphorus pollution, mainly in runoff from agricultural land. The Wye Valley featuring the River Wye is a designated Site of Special Scientific Interest (SSSI) which forms part of the Peak District Dales Special Area of Conservation (SAC)<sup>3</sup>. SACs are amongst the most important and sensitive nature conservation sites and are afforded the highest levels of protection under the Habitat Regulations<sup>4</sup>. Whilst the Habitats Regulations derive from European legislation, like many European regulations and directives they continue to take effect having been adopted into UK law. Elevated levels of phosphorus can have a detrimental impact on the ecology and biodiversity of rivers, and therefore concentration limits have been set.<sup>5</sup>
- 1.2.13 The water produced by housing is acknowledged as having a direct effect on the amount of phosphate in the River Wye once it is discharged from wastewater treatment works (WwTW). The need for water efficiency measures to help reduce water produced by housing is therefore important to reduce stress on the sewerage system and enable efficient treatment to reduce phosphate discharged to the River Wye.

### 1.3 Why this guidance is needed

- 1.3.1 The High Peak Local Plan adopted in 2016 includes two specific policies that relate to water resource and quality in the Buxton area:
- S7: Buxton Sub-area Strategy
  - EQ1: Climate Change
- 1.3.2 Although these policies set out the Council's requirements in relation to mineral water resources, water quality, and water efficiency the guidance in this SPD sets out in greater detail:
- The importance of the policies and why their objectives need to be met;
  - The different types of protection afforded to groundwaters;
  - The potential risk factors;
  - Types of development that may be particularly sensitive;
  - guidance that could be helpful to applicants when considering development proposals; and
  - practical measures that can be undertaken to meet water efficiency measures.
- 1.3.3 Any development, whether it is subject to a planning application or not, must not negatively impact on the water quality of any receiving watercourse or groundwater. During the development process, developers should ensure that any proposal does not negatively deteriorate the 'status' of any nearby watercourse as defined under the Water Framework Directive (WFD). An objective for the WFD is to prevent deterioration in 'status' for all waterbodies.

<sup>3</sup> See Appendix D for the location of the SAC and component Wye Valley SSSI.

<sup>4</sup> Conservation of Habitats and Species Regulations 2017 (as amended)

<sup>5</sup> The Water Framework Directive target for phosphate load in the Wye is 0.015 mg/l. See: <http://publications.naturalengland.org.uk/file/4589265656741888>



- 1.3.4 The guidance contained in the SPD highlights the importance of water quality and resources in Buxton and guides developers and applicants to key resources that can inform development proposals at the outset of the design process.

## 1.4 How to use this Supplementary Planning Document

- 1.4.1 The approach set out within this SPD will ensure that water quality and resources within Buxton are considered through all stages of the development process in line with the policies of the Local Plan. This SPD should therefore be used by:

- Developers and individuals considering new development, including changes of use for land, or engineering proposals;
- Developers and individuals considering alterations or changes of use to existing sites/buildings; and
- Design and engineering teams when preparing surface water drainage schemes.

In turn, the Council will use the SPD to help consideration of planning applications and when selecting relevant planning conditions.

- 1.4.2 The SPD should be read in conjunction with the Local Plan as a whole.

## 1.5 How this Supplementary Planning Document is structured

- 1.5.1 The SPD is structured as follows:

- **Section 2** – sets out the legislative and policy context
- **Section 3** – outlines the water protection zones and why they are important
- **Section 4** – provides guidance on pre-application advice
- **Section 5** – sets out guidance to help protect Buxton’s mineral waters
- **Section 6** – sets out how water efficiency measures can be achieved





## 2. Legislation, planning policy and guidance

### 2.1 Introduction

- 2.1.1 Local planning policy is guided and influenced by European and national legislation as well as national planning policy. **Sections 2.2** and **Section 2.3** consider the European and national context respectively and **Section 2.4** considers the local policy context.

### 2.2 European and National Legislative Context

#### The Water Framework Directive

- 2.2.1 The Water Framework Directive establishes a framework for the protection of inland surface water, estuaries, coastal waters and groundwater. The Water Framework Directive - 2000/60/EC (WFD) came into force in England in 2003 via The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. There are four main aims of the WFD:
- To improve and protect inland and coastal waters;
  - To promote sustainable use of water as a natural resource;
  - To create better habitats for wildlife that lives in and around water; and
  - To create a better quality of life for everyone.
- 2.2.2 The WFD sets out status objectives for each river in England. Buxton falls under the Humber River Basin Management Plan<sup>6</sup>.

#### Groundwater Protection in Europe

- 2.2.3 The Groundwater Directive 2006/118/EC was developed in response to the requirements of Article 17 of the WFD and set out the technical specifications required for the protection of groundwater against pollution and deterioration.

#### The Habitats Directive

- 2.2.4 The Habitats Directive 92/43/EEC of 21 May 1992 has been transposed in UK law within the Conservation and Conservation of Habitats and Species Regulations 2017 (as amended). The Conservation of Habitats and Species Regulations seeks to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora.
- 2.2.5 Sections of the River Wye form part of the Wye Valley Site of Special Scientific Interest (SSSI) - a component site of the Peak District Dales Special Area of Conservation (SAC). Conservation Objectives have set for phosphate levels in the Wye to achieve good ecological status.
- 2.2.6 The relevant caselaw must be considered where applicants are required to undertake a project-based Habitats Regulations Assessment (HRA) and impacts are identified. Of particular relevance are the 'Dutch cases'<sup>7</sup>.

<sup>6</sup> Available via: <https://www.gov.uk/government/publications/humber-river-basin-district-river-basin-management-plan>

<sup>7</sup> Coöperatie Mobilisation for the Environment UA and Others v College van gedeputeerde staten van Limburg and Others (C-293/17 & C-294/17)



## Flood and Water Management Act 2010

2.2.7 The Flood and Water Management Act 2010 (FWMA) places the responsibility for co-ordinating 'local flood risk' management on the relevant county or unitary authority, making them a Lead Local Flood Authority (LLFA). In this context, the Act uses the term 'local flood risk' to mean flood risk from:

- Surface runoff;
- Groundwater; and
- Ordinary watercourses

The LLFA for High Peak is Derbyshire County Council.

## Natural mineral water, spring water and bottled drinking water (England) (Amendment) Regulations 2018

2.2.8 The purpose of these regulations is to protect human health and ensure a good quality of water for consumers. The Regulations transpose EU Directive 2015/1787 into law in England and are concerned with monitoring of mineral, spring and bottled drinking water.

## 2.3 National Planning Policy Context

### National Planning Policy Framework

2.3.1 The National Planning Policy Framework (NPPF)<sup>8</sup> sets out the Government's aim for the planning system to enhance the natural and local environment by (NPPF, 2021: para. 174(d)):

*"preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans."*

### National Planning Practice Guidance

2.3.2 National Planning Practice Guidance (PPG)<sup>9</sup> supports the implementation of the NPPF. The PPG provides a range of guidance on water supply, wastewater and water quality. Guidance is provided on considerations for planning applications, including:

- Water supply;
- Water quality;
- Assessing impacts on water quality;
- Particular considerations that apply in areas with inadequate wastewater infrastructure; and
- Where information can be found on the water environment.

<sup>8</sup> Ministry of Housing, Communities and Local Government (2021) National Planning Policy Framework. Available via: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

<sup>9</sup> Ministry of Housing, Communities and Local Government (2019) Planning Practice Guidance is available via: <https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality>



- 2.3.3 Applicants should have regard to the NPPF and PPG when preparing development proposals. The Council will have regard to the NPPF and PPG when determining applications.

## 2.4 Local Planning Policy Context

- 2.4.1 The Local Plan sets out policies related to the protection of water quality and supply specifically in relation to the Buxton Sub-area. The policies that this SPD supports are:

### Policy S7: Buxton Sub-area Strategy

- 2.4.2 Policy S7 seeks to establish Buxton as England's leading spa town and consolidate its role as the principal service centre for the Peak District. It seeks to protect and enhance *"the unique character of Buxton's spa heritage, townscape and natural environment to maintain the quality of life and act as a catalyst for tourism by"* (amongst other things):
- *Protecting the quality and supply of natural mineral water. Development, including proposals for Sustainable Drainage Systems (SuDS) should have regard to the Buxton Mineral Water Catchment Area, and Nitrate Vulnerable and Groundwater Source Protection Zones in terms of their impact on water quality and quantity*
  - *Requiring new development to demonstrate compliance with Policy EQ1 in relation to the adoption of high water efficiency standards and measures to recycle and minimise water consumption*
  - *Working with partner organisations through the River Wye Water Pollution Plan to protect water quality on the River Wye SSSI which is a component of the Peak District Dales Special Area of Conservation (SAC)*

### Policy EQ1: Climate Change

- 2.4.3 Policy EQ 1 provides for increased water efficiency in new housing<sup>10</sup> reflecting the need to support measures that help to reduce phosphate loading in the River Wye; and more broadly, support sustainable use of water resources. With regards to water quality and efficiency within Buxton the policy states that:
- *Applications for new build residential development in the Buxton Sub-Area should meet the optional national technical requirement for water efficiency of 110 litres per person per day to minimise the phosphate load to the River Wye via discharges from the Buxton Sewage Treatment Works, unless it can be demonstrated that doing so would adversely impact on a scheme's viability;*

And additionally, it outlines that a low carbon future will be achieved by (amongst other things):

- *Supporting high water efficiency standards and measures to recycle and minimise water consumption.*
- 2.4.4 In addition to these policies, *Policy EQ 10: Pollution Control and Unstable Land* sets out the Council approach to protect people and environment from unsafe, unhealthy and polluted environments, including in relation to watercourses and groundwater.

<sup>10</sup> Guidance on the higher housing optional technical standards that are adopted in the Local Plan is available here: <https://www.gov.uk/guidance/housing-optional-technical-standards>

## 3. Water Protection Areas

### 3.1 Types of water

#### Natural Mineral Water

- 3.1.1 As described in **Section 1.2**, there are two recognised natural mineral waters arising in and close to Buxton: The thermal waters at St Ann's Spring and associated springs arising close to or under the Crescent in Buxton; and Rockhead Spring.
- 3.1.2 Natural mineral water is the statutory name for a specific type of water that comes from a named underground source that has a constant flow, is pure and has a consistent mineral composition. Natural mineral water must be officially recognised through a local authority after a qualifying period of two years. Natural mineral water must also be registered with the Food Standards Agency. Once registered the water becomes subject to control under the Natural mineral water, spring water and bottled drinking water (England) (Amendment) Regulations 2018 which includes restrictions such as a prohibition on chemical additives and certain labelling requirements.
- 3.1.3 The natural mineral waters of Buxton should not be confused with 'spring water', 'table water' or 'prepared water'. Spring Water is similar to natural mineral water and comes from a single non-polluted ground water source, however, unlike natural mineral water there is no formal recognition process required although it must still be registered with the local authority.
- 3.1.4 Many natural mineral waters begin their lives as spring waters trading as such during the two year testing period. Unlike natural mineral waters, spring waters may undergo limited, permitted treatments but like natural mineral waters must comply with the bottled drinking water regulations. Table or prepared waters can originate from any type of supply, including public water supply, be from more than one source, and can also be treated to comply with chemical or microbiological safety requirements or to add minerals. They require no official approval or authentication but are also subject to the bottled drinking water regulations.

#### Water Framework Directive (WFD) water bodies

- 3.1.5 The overall objective of the WFD is to establish a framework for protecting water bodies (rivers, lakes, estuaries and groundwater) based on a quantitative assessment of their ecological and chemical condition. The WFD seeks to achieve Good status in all water bodies.
- 3.1.6 The River Wye and its catchment in the Buxton sub-area is a water body recognised by the WFD (ref. GB104028058460, name Wye from Source to Monk's Dale<sup>11</sup>). The current status of the Wye from Source to Monk's Dale water body is Moderate based on the assessment of both its ecological and chemical condition. Phosphate from sewage treatment works is identified as the most probable reason for the water body not achieving Good status but it is recognised that septic tanks and surface run off from farming also contribute.
- 3.1.7 Two WFD groundwater bodies are also defined for the Buxton sub-area:
- Derwent - Carboniferous Limestone (ref. GB40401G103100) to the south and east. Buxton thermal springs emerge from this groundwater body;

<sup>11</sup> Environment Agency Catchment Data Explorer. Available via: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB104028058460>



- Derwent - Secondary Combined (ref. GB40402G990400) which is a large waterbody that loops around the north, west and east extending well beyond the Buxton Sub-area.

3.1.8 Both water bodies have overall Poor status due to having Poor chemical status as a result of pollution from abandoned mine workings. However, this occurs outside the Buxton Sub area. Both water bodies have Good quantitative status.

## 3.2 Source Protection Zones (SPZ)

3.2.1 Source Protection Zones (SPZ) are identified by the Environment Agency to protect sources of drinking water such as wells, boreholes and springs. The Environment Agency uses SPZ as an initial screening tool to identify areas in which some activities or developments may potentially adversely affect groundwater intended for human consumption.

3.2.2 SPZ around location sites are defined by groundwater travel time to an abstraction site using information on geology type, rainfall and hydrological boundaries. SPZ are divided into the following based on how long it takes for pollutants to travel from the water below ground to the point where water is taken<sup>12</sup>:

- **SPZ1 (Inner Protection Zone)** - This zone provides the highest level of protection for groundwater sources. Buxton falls within SPZ1 because groundwater is able to flow very rapidly through fissures in some parts of the Carboniferous Limestone aquifer. Rapid flow means that the time of travel for water in the ground is shorter so there is less opportunity for contamination to be filtered out or to break down.
- **SPZ2 (Outer Protection Zone)** - This zone is larger than SPZ1 and provides protection from contaminants that take longer to break down in groundwater.
- **SPZ3 (Total Catchment)** - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.
- **SPZ4 (Zone of Special Interest)** - These zones highlight areas (mainly on non-aquifers) where known local conditions mean that potentially polluting activities could impact on a groundwater source.

3.2.3 The Buxton Sub-area falls with SPZ:1. The *Environment Agency's approach to groundwater protection* (2018)<sup>13</sup> sets out position statements relevant to potentially polluting activities and development within SPZ1 and provides an indication of the risk to groundwaters and means of mitigating those risks. Within this SPZ is an area along the northern boundary defined by the Environment Agency as an SPZ1c area. This means that within this area the Environment Agency will filter surface activities but continue to assess on an individual basis whether controls need to be applied to sub-surface excavations, based on the nature of and depth of excavation.

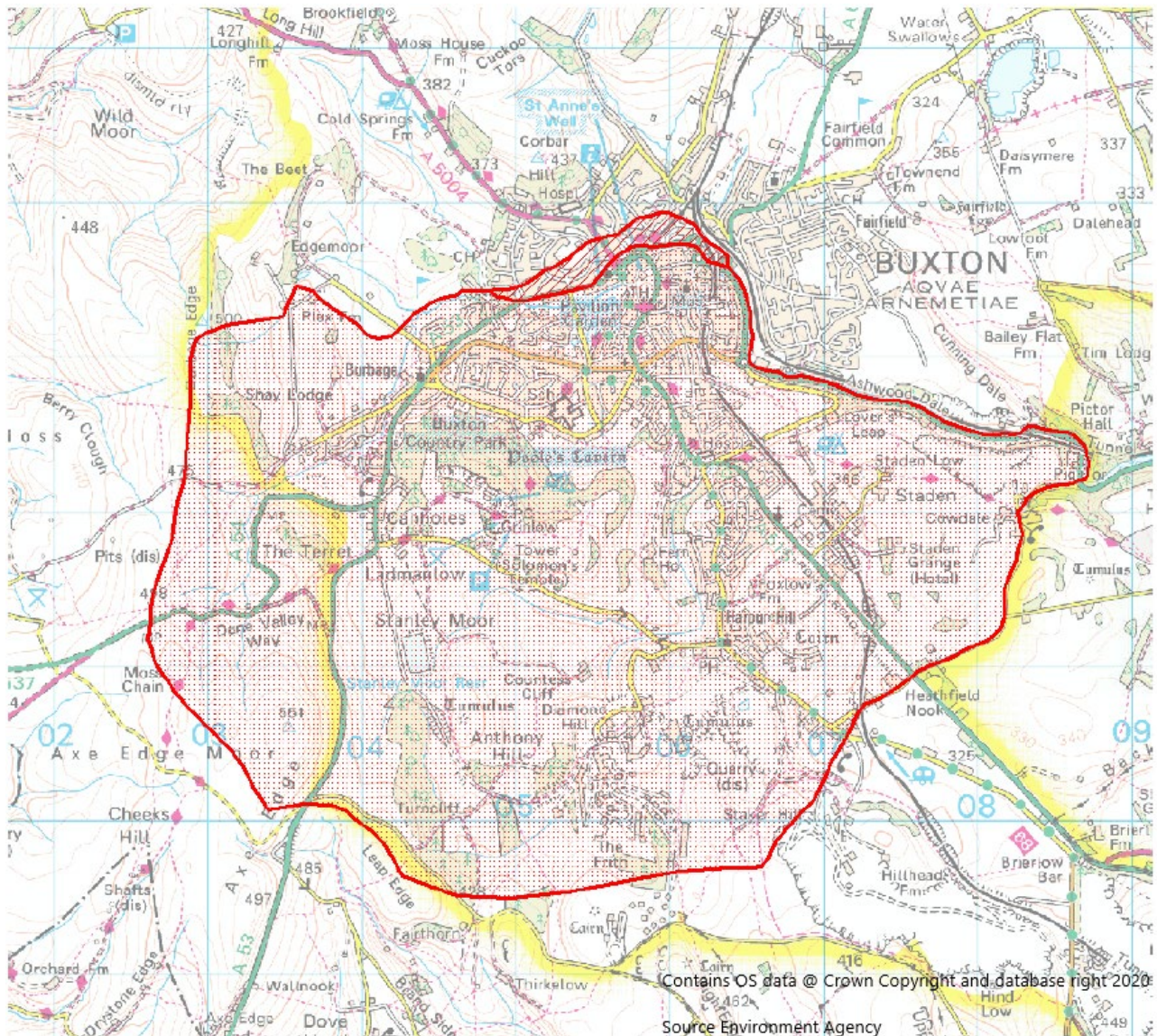
3.2.4 The Council recognises the importance of the SPZ within Policy S7 and requires all development to have regard to its importance. **Figure 3.1** shows the extent of the Buxton SPZ.

3.2.5 Applicants should refer to the Council's interactive mapping service via:  
<https://www.highpeak.gov.uk/article/2223/Interactive-local-plan-map>.

<sup>12</sup> Guidance on SPZs and how they are defined can be found via: <https://www.gov.uk/guidance/groundwater-source-protection-zones-spzs#find-groundwater-spzs>

<sup>13</sup> Environment Agency (2018) *Environment Agency's approach to groundwater protection*. Available via: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf)

Figure 3.1 Buxton's Source Protection Zone



### 3.3 Areas of Sensitivity

3.3.1 The Council has undertaken further hydrogeological work to understand the vulnerability of thermal springs within the Environment Agency's SPZ to help inform the implementation of Policy S7. This work has involved detailed consideration of past and present studies into the geology underlying Buxton to give an estimation of likely sensitivity in relation to the depth of shale overlying the limestone through which the waters flow. This is of import because any potential incursion or intrusion into the limestone could contaminate or disrupt flow to the thermal waters. The outcome of this work is the identification of two additional protection areas (see **Figure 3.2**):

- **Core Protection Area** – within 250m of known thermal groundwater associated with Buxton thermal springs, older rock is estimated to be less than 25m thick, and the ground area below 300m AOD ('above ordinance datum'); and
- **Extended Protection Area** – within 500m of known thermal groundwater associated with Buxton thermal springs and where the older rock is estimated to be less than 100 m thick.

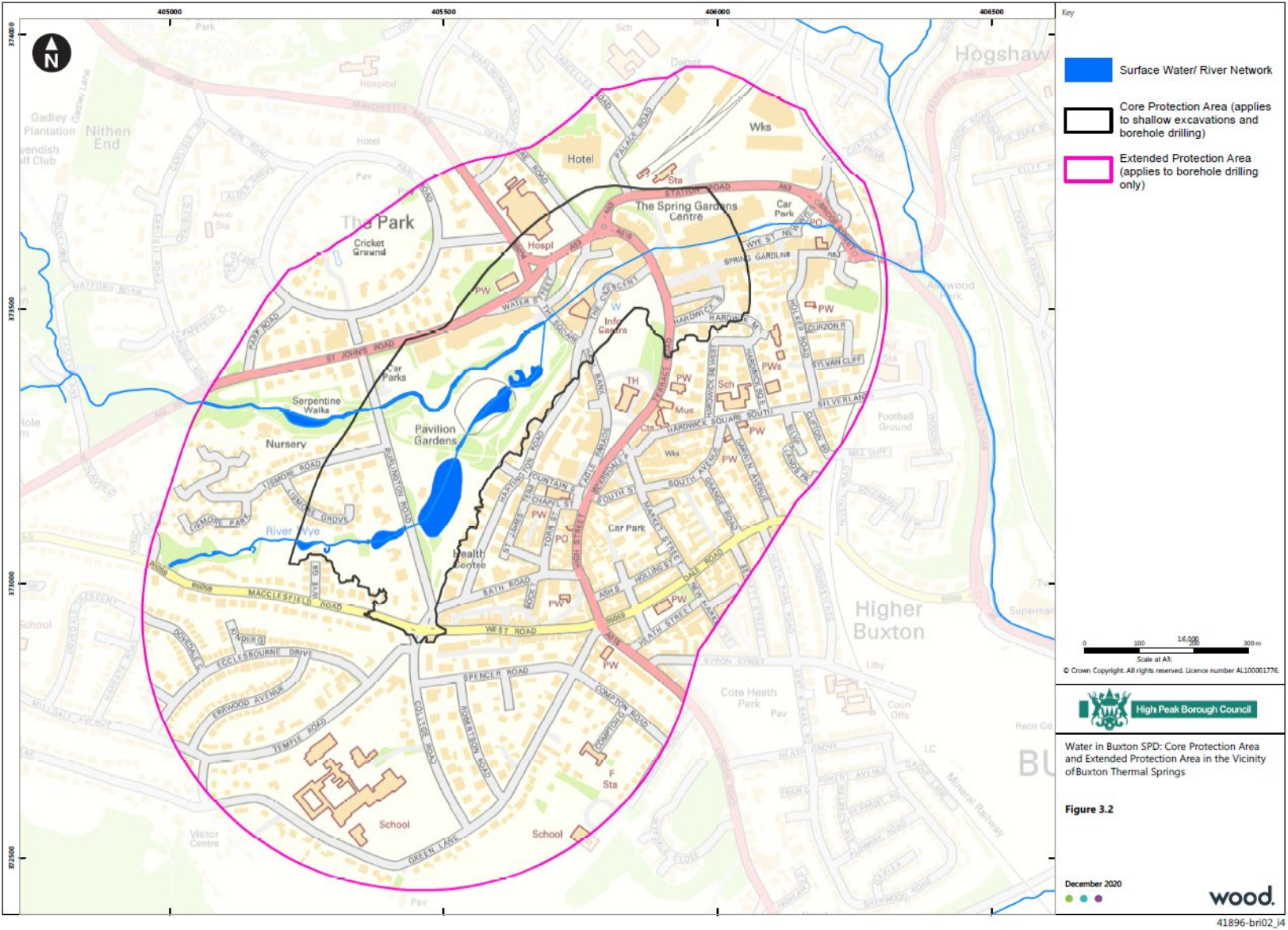


The Core and Extended Protection Areas lie wholly within the Inner Groundwater Source Protection Zone (SPZ1) for Buxton thermal springs.

3.3.2

When considering planning applications, the Council will use these areas to help determine whether the application needs greater consideration for the potential impacts on the thermal springs (in accordance with Policy S7 objectives). Further specific practical guidance for the application of the areas when considering development that comprise drilling or excavations is set out in **Section 5** and **Appendix A** and **B**.

Figure 3.2 Core Protection Area and Extended Protection Area

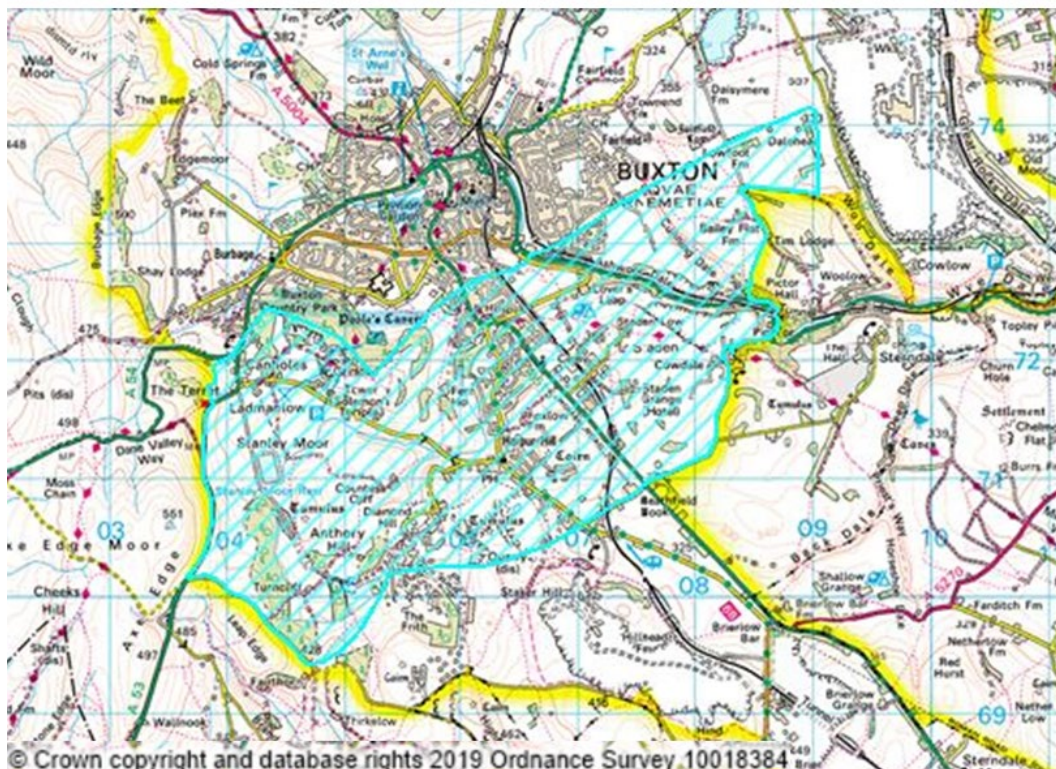




### 3.4 Buxton Mineral Water Catchment Area

- 3.4.1 The Buxton Mineral Water Catchment Area is shown in **Figure 3.3**. The Buxton Mineral Water Catchment Area is an indicator of where the thermal spring waters are thought to originate. The catchment was drawn up based on best knowledge over 20 years ago and while it retains value because precise boundaries and routes of waters are not completely known, it is considered that the Core and Extended Protection Areas in combination with the Environment Agency's SPZ form a more accurate current understanding of the geological position where these overlap. Given the importance of safeguarding the mineral water sources a precautionary approach to water protection is considered appropriate.
- 3.4.2 In addition, for areas that lie only within the Buxton Mineral Water Mineral Catchment area consideration must still be given to protecting mineral water sources in accordance with Local Plan Policy S7. Furthermore, less is known about the dynamics of the water system and geology serving Rockhead Spring which must also be safeguarded and where the Codes of Practice are not applicable, although the SPZ may be.
- 3.4.3 Applicants should refer to the Buxton Mineral Catchment Area on the Council's interactive mapping service via : <https://www.highpeak.gov.uk/article/2223/Interactive-local-plan-map>.

Figure 3.3 Buxton Mineral Water Catchment Area



### 3.5 Nitrate Vulnerable Zones

- 3.5.1 Nitrate Vulnerable Zones (NVZ) are areas designated as being at risk from agricultural nitrate pollution. Within NVZs farmers and land managers are required to take steps to prevent manure,



fertiliser and soil getting into watercourses to prevent diffuse water pollution.<sup>14</sup> The Buxton Sub-area does not currently include part of an NVZ but NVZ designations are reviewed every four years.

3.5.2 Land owners can find out if their land is included in a NVZ via the Environment Agency's online mapping services: <https://environment.data.gov.uk/farmers/>.

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<sup>14</sup> Government guidance for land owners and farmers is available via: [www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution](http://www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution)

## 4. Pre-Application Advice

### 4.1 Roles and responsibilities

- 4.1.1 Pre-application advice helps developers and applicants understand the water management issues relating to their proposal in advance of a planning application being submitted. Additionally, engagement with the Council can establish what type of planning approval is required and the relevant supporting studies or documentation that should be submitted with the application to demonstrate the suitability of a proposal.
- 4.1.2 To ensure that applications are validated and determined in a timely manner it is important to include the relevant information required by the Council. Applicants are therefore advised to consult with the Council utilising the pre-application service for any form of development, and particularly, where development may have the potential to impact on water resources.
- 4.1.3 In particular, within the Core and Extended Protection Areas advice from a hydrogeologist may be helpful as a preliminary step. Developers may find it helpful to consider the Codes of Practice as set out in **Section 5** at an early stage of development planning.
- 4.1.4 The Council's pre-application advice service can be found via:  
<https://www.highpeak.gov.uk/hp/council-services/planning-and-buildings>
- 4.1.5 There is no charge for pre-application advice for householders.

#### Additional advice

- 4.1.6 For significant proposals, applicants should engage the relevant national organisations of Natural England and the Environment Agency (EA) prior to the submission of a planning application. Additionally, in some cases applicants will need to secure environmental permitting approvals from the Environment Agency. This should be sought at the earliest opportunity.

## 5. Protection of mineral water sources in Buxton

### 5.1 Types of development:

#### Drilling boreholes and digging shallow excavations

- 5.1.1 There is a need to avoid changes to hydraulic pressure that could affect the balance between the cold and thermal groundwater systems. Excavations into the underlying Carboniferous Limestone could potentially present a risk to mineral waters and result in changes to groundwater flow. There may also be risks of contamination of the underlying aquifer.

#### Legal Requirements to protect groundwater quality

- 5.1.2 Under the Environmental Permitting (England and Wales) Regulations 2016 (as amended) (Environmental Permitting Regulations (2016) from here on) it is a criminal offence to “cause or knowingly permit” groundwater to become polluted. Penalties include fines, imprisonment or both.
- 5.1.3 As well as legal requirements not to pollute groundwaters, civil liability may also follow where mineral waters are adversely affected by the activities of a third party which could be substantial. Developers should take their own advice in this regard and take out appropriate insurance for works they may wish to carry out in advance.

#### Boreholes

- 5.1.4 Policy S7 protects the quality and supply of natural mineral water in the Buxton Sub-area. In order to achieve this the Council applies a precautionary approach to the drilling of boreholes within the *Core Protection Area* and *Extended Protection Area* (**Figure 3.2**). Borehole drilling in these areas can adversely impact the Buxton thermal springs.
- 5.1.5 If the proposed drilling location has the potential to be contaminated there is a risk that the borehole could lead to pollution of groundwater and migration of contaminants to Buxton Thermal Springs, a borehole also has the potential to alter the dynamics of the aquifer and groundwater systems.
- 5.1.6 The Council requests that prior to undertaking any works, developers and applicants follow the guidance set out in *Code of Practice: Drilling of Boreholes in the Vicinity of Buxton Thermal Springs* (see **Appendix A**). In summary and in accordance with the Code of Practice, the Council requests that the following is undertaken by a person qualified in hydrogeology or geoenvironmental engineering and having experience of completing hydrogeological desk studies and groundwater risk assessments prior to any works:
- i. **Desk study** to collate and understand background information. This should identify sensitivity of proposed drilling location and the local geology/hydrogeology/hydrology conditions
  - ii. **Risk assessment** to understand the risks to the Buxton Thermal Springs from the proposed activities. It should include consideration of;
    - ▶ The likelihood of encountering thermal water;
    - ▶ The likelihood of introducing near surface contamination into the Carboniferous Limestone aquifer;

- ▶ The likelihood of contaminating the Carboniferous Limestone by the drilling process, either by causing turbidity or by accidental contamination from the drilling equipment; and
  - ▶ The likelihood that the groundwater system will be disturbed and affect the balance between the thermal and cold groundwater systems.
- iii. **Method Statement** which demonstrates that the activities can be conducted safely without detriment to the Buxton thermal springs, including appropriate actions if thermal groundwater is encountered. If the drilling could result in contamination or disturbance of the groundwater regime and affect water quality in the Buxton thermal springs, the drilling method, borehole design and, if required, monitoring should provide adequate mitigation. The approach to be taken should be prepared and discussed with the Council, as abstraction licensee holder and appropriate regulators. The Method Statement should include coverage of technical requirements relating to:
- ▶ Supervision
  - ▶ Materials
  - ▶ Inspection Pits
  - ▶ Drilling Methodology, focusing on:
    - Drilling Method to ensure risks are minimised;
    - Groundwater Temperature/ Artesian Conditions recording;
    - Drilling equipment;
    - Drilling fluid;
    - Borehole Casing and backfill material;
    - Cleaning Equipment;
    - Waste Collection and Disposal; and
    - Fuel Storage and plant refuelling.

5.1.7 The recommended approach to be taken in order to prepare the **Desk Study, Risk Assessment** and **Method Statement**, including the technical requirements, is described in the *Code of Practice: Drilling of Boreholes in the Vicinity of Buxton Thermal Springs* (see **Appendix A**).

### Shallow excavations

- 5.1.8 All excavations greater than 600mm could potentially affect the quality of the thermal spring within the Core Protection Area. The laying of cables and excavation for shallow foundations can therefore be considered as risks to groundwater quality.
- 5.1.9 When undertaking shallow excavations a precautionary approach is required. Ideally, such activities would be avoided within the *Core Protection Area* (see **Figure 3.2**).
- 5.1.10 However, if such activities are to be completed the Council requests that Applicants follow guidance set out in the *Code of Practice: Shallow Excavations in the Vicinity of Buxton Thermal Springs* (see **Appendix B**). A similar approach is taken to boreholes (set out above) where a **Desk Study, Risk Assessment**, which must consider Buxton thermal springs as a receptor, and **Method Statement** are prepared before any works undertaken. The **Method Statement** should include coverage of the following technical requirements relating to:

- ▶ Supervision;
- ▶ Materials;
- ▶ Probe holes to determine ground conditions before excavation commences;
- ▶ Excavation Methodology:
  - Method;
  - On-site Plant;
  - Waste Collection and Disposal;
  - Fuel Storage and Plant Refuelling.

5.1.11 The approach that is recommended is to be taken in order to prepare the **Desk Study, Risk Assessment** and **Method Statement**, including the required technical requirements, is described in the *Code of Practice: Shallow Excavations in the Vicinity of Buxton Thermal Springs* (see **Appendix B**).

### Excavation of basement extensions or developments including subterranean basements

- 5.1.12 Basement developments have the potential to make land become more efficient, especially in areas where developable land is limited. However, there is also a perception that such developments can impact on the structural integrity of a building(s) and nearby infrastructure and unduly intensify development.
- 5.1.13 Within the Buxton sub-area, the Council is also concerned about the potential for basements and subterranean development to cause harm to groundwater water quality and impact on the thermal spring.
- 5.1.14 As set out within this SPD, the groundwaters of Buxton are particularly sensitive to ground excavations. Therefore, the Council expects applicants to follow the same approach as set out in **Section 5.2** with regards to excavations to demonstrate that basement development proposals comply with the requirements of Local Plan Policy S7. This involves appropriate preparation of Desk Study, Risk Assessment and Method Statement to inform development proposals.

### Planning Permission

- 5.1.15 Refurbishment or conversion of an existing basement may not require planning permission unless there are engineering works or other development involved, which would then require planning approval.
- 5.1.16 It is the Council's view that while the General Permitted Development Order (2015)<sup>15</sup> may allow some basement developments without planning permission it is unlikely to apply to basement developments in the Buxton sub area where technical engineering solutions are likely to be required; as they would for any basement to be constructed with the SPZ, Buxton Mineral Water Catchment Area, Core or Extended Protection Areas. This is because the permitted development rights do not apply to engineering works.
- 5.1.17 However, as the General Permitted Development Order is updated regularly, it is advised that specialist planning advice is taken. Applicants are also advised that before undertaking any form of

<sup>15</sup> Available via: <http://www.legislation.gov.uk/ukxi/2015/596/contents/made>

basement development or works to existing basements that they consult with the Council utilising the pre-application service.<sup>16</sup>

## 5.2 When additional conditions to prevent pollution of water sources may be required over and above permitting requirements

- 5.2.1 In some circumstances the Council may apply certain conditions when granting planning permission to ensure that water quality and resources are not compromised. Such conditions exist to mitigate the adverse impacts of a development that may otherwise have been refused planning permission.
- 5.2.2 It is important to note that NPPF (2021: para 56) states that planning conditions should only be imposed where they are *'necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects.'* Applicants should be aware that the Council considers the water resources of the Buxton Sub-area to be of significance for both the environment and economy of Buxton, as demonstrated by Local Plan policies EQ1 and S7 and the further guidance set out in this SPD, and will seek to implement appropriate conditions as necessary.
- 5.2.3 Template examples of planning conditions that may be applied to development in the Buxton sub-area can be found in **Appendix C**. The list provided is not exhaustive and will depend on the development proposed.
- 5.2.4 Applicants are advised to make use of the Council's pre-application service as it may be possible to discuss potential conditions that may be attached if the development is granted approval.

## 5.3 Other regulatory consents that may be required when planning consent may not be needed

- 5.3.1 Planning consent may not be required in all circumstances (dependent on permitted development rights). A range of consents and permits may be required to undertake works outside of the planning framework. If pollution is caused by actions or development outside the scope of the planning system or building regulations, the Environment Agency has a range of enforcement powers for incidents of water pollution<sup>17</sup>.
- 5.3.2 Under the Environmental Permitting Regulations (2016), a permit is required for most discharges of potentially polluting liquids into or onto the ground (i.e. to groundwater) or into surface waters (such as rivers or streams). The Environment Agency can provide some free planning advice if the proposed development is in a flood zone, close to a main river, on contaminated land or handles waste or hazardous substances but also offer an enhanced paid for service.<sup>18</sup>

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<sup>16</sup> For further detailed advice and information on Permitted Development Rights please refer to: <https://www.highpeak.gov.uk/hp/council-services/planning-and-buildings> There is no charge for pre-application advice for householders.

<sup>17</sup> Through the Environmental Permitting (England and Wales) Regulations 2016, Environmental Damage (Prevention and Remediation) (England) Regulations 2015 and Water Resources Act (as amended) 1991.

<sup>18</sup> Environment Agency (2018) The Environment Agency's approach to groundwater protection. Available via: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf)

- 5.3.3 Applicants are also advised to consult the good practice guides produced by the Environment Agency if the development is intending to use Ground Source Heating and Cooling<sup>19</sup> whilst any vertical borehole drilling for ground source heat pumps should follow guidance in **Section 5.1**. There is potential for adverse effects on groundwater quality that need to be considered.
- 5.3.4 Other regulatory consent or permits that may need to be obtained include:
- European Protected Species
    - European Protected Species receive full protection under law<sup>20</sup>. Applicants should apply to Natural England and seek advice from an experienced professional ecologist to determine if surveys within the development site may be required. Applicants must also address other ecological impacts/considerations, such as impacts on other protected species, priority habitats or species, where relevant.
  - Flood Defence Consents
    - Such consents exist to ensure that any development does not increase flood risk. Applicants should consult with the Environment Agency if the proposed development is within a flood risk area.
  - Hazardous Substances Consents
    - Any site which needs to use or store hazardous substances such as chlorine, hydrogen, or natural gas, at or above certain thresholds, requires a hazardous substance consent (HSC) before it can operate.<sup>21</sup>
  - Party Walls
    - A wall is a "party wall" if it stands astride the boundary of land belonging to two (or more) different owners. Some kinds of work carried out to a property may not be controlled by the Building Regulations, but may be work which is covered by the Party Wall etc. Act 1996. This is a separate piece of legislation with different requirements to the Building Regulations<sup>22</sup>.
  - Building Regulation consent
    - Building regulation consent or notification is required for many forms of development under the Building Act 1984. To check whether consent or notification is required developers are asked to check the Council's website where further information may be found.
- 5.3.5 This list is not exhaustive or necessarily applicable to every development. Developers will need to ensure that all applicable consents are in place prior to undertaking any work.
- 5.3.6 As well as any regulatory permits or consents that may be required developers or contactors may also incur civil liability for any harm to established water ownership rights that may exist and are advised to seek insurance cover for any works carried within the extended protection area and/or SPZ where a risk of harm to the water source is possible.

<sup>19</sup> Environment Agency - Environmental good practice guide for ground source heating and cooling. Available via: [https://www.gshp.org.uk/pdf/EA\\_GSHC\\_Good\\_Practice\\_Guide.pdf](https://www.gshp.org.uk/pdf/EA_GSHC_Good_Practice_Guide.pdf)

<sup>20</sup> The Conservation of Species and Habitats Regulations 2017.

<sup>21</sup> The list of current hazardous substances can be found via: <http://www.legislation.gov.uk/ukxi/2015/627/schedule/1/made>

<sup>22</sup> If applicants are unsure regarding party walls they should consult <https://www.gov.uk/guidance/party-wall-etc-act-1996-guidance>.



## 5.4 Requirements for Sustainable Drainage Systems (SuDS)

- 5.4.1 Sustainable Drainage Systems (SuDS) can support the effective drainage of surface waters but it is important that they do not affect groundwater quality or water quality on the River Wye SSSI. Technical standards for SuDS can be found within Defra's Sustainable Drainage Systems: Non-statutory technical standards for sustainable drainage systems (March 2015)<sup>23</sup>. These standards should be used in conjunction with the NPPF and PPG. The standards reflect the need to reduce flood risk from surface water, improve water quality, improve the environment and also ensure that the SuDS systems are robust, safe, and affordable. The National Standards set out the requirements for the design, construction, operation and maintenance of SuDS in England.
- 5.4.2 SuDS need to be designed to remain safe and accessible for the life-time of the developments they serve, as well taking into account future amenity and maintenance requirements. Details should be provided which demonstrate the future management, funding and maintenance of the entire scheme. Where necessary the Council will apply conditions to ensure SuDS are maintained and remain safe over the lifetime of the development.
- 5.4.3 The Environment Agency's approach to groundwater protection<sup>24</sup> requires a hydrogeological risk assessment to be completed for SuDS within SPZ1 to show that pollution of groundwater will not occur and that the SuDS will not pose an unacceptable risk to the potable groundwater source. Discharges via boreholes or deep infiltration systems which result in a direct discharge to groundwater are to be avoided. Shallow systems should provide attenuation of any pollutants before they reach the groundwater. The Council will require evidence of the risk assessment has been undertaken when applying for permission for SuDS within SPZ1.

## 5.5 Septic tanks

- 5.5.1 As required by Local Plan policies and the NPPF, new development proposals must demonstrate that there is no adverse impact on water quality. The Council is concerned septic tanks could affect the groundwater quality in the Buxton sub-area and may impact upon the condition of the Peak District Dales SAC.
- 5.5.2 Foul drainage from new developments should be connected to the public sewer. Only where all other options have been exhausted and connection to the public sewer is not possible should alternative non-mains drainage solutions be considered.
- 5.5.3 Septic tanks should only be considered by developers if it can be clearly demonstrated by the applicant that discharging into a public sewer to be treated at a public sewage treatment works or a package sewage treatment plant is not feasible (taking into account cost and/or practicability).<sup>25</sup> The associated shallow infiltration systems should be designed to provide appropriate attenuation of any pollutants before they reach groundwater.

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<sup>23</sup> Available via:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/415773/sustainable-drainage-technical-standards.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf)

<sup>24</sup> Environment Agency (2018) The Environment Agency's approach to groundwater protection. Available via:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf)

<sup>25</sup> Planning Practice Guidance Paragraph: 020 Reference ID: 34-020-20140306. Available via:

<https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality>

- 5.5.4 The Environment Agency's *General Binding Rules for Small Sewage Discharges*<sup>26</sup> prevent the use of septic tanks within 50 m of a SAC, within 30 m of a public foul sewer or within Groundwater SPZ1. The practical effect of these restrictions is that septic tanks within the Buxton sub-area will require permitting under the Environmental Permitting Regulations (2016).
- 5.5.5 The Council advises that applicants should begin pre-permitting discussions or submit an application for a permit at the earliest opportunity with the Environment Agency as part of their pre-application enquiries.

## 5.6 Above ground storage of chemicals and fuels

- 5.6.1 Section D of the *Environment Agency's approach to groundwater protection* (2018)<sup>27</sup> sets out a position statement relevant to potentially polluting activities related to fuel and hazardous substances storage to prevent such substances being released into groundwaters. Applicants proposing developments in the Buxton area incorporating above ground storage of chemicals, fuels or bulk liquids, or will require such storage through construction or demolition, should ensure that the Environment Agency's position statement is taken into account, the risks assessed and a scheme is in place for construction.
- 5.6.2 In addition, any domestic, commercial and industrial development that may involve above ground fuel storage must ensure compliance with The Control of Pollution (Oil Storage) England Regulations (2001).

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<sup>26</sup> Department for Environment, Food and Rural Affairs (Defra) (2015) Reform of the regulatory system to control small sewage discharges from septic tanks and small sewage treatment plants in England. Available via: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/397173/ssd-general-binding-rules.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/397173/ssd-general-binding-rules.pdf)

<sup>27</sup> Environment Agency (2018) Environment Agency's approach to groundwater protection. Available via: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf)

## 6. Water efficiency in Buxton

### 6.1 Introduction

- 6.1.1 Local Plan Policy EQ 1 supports high water efficiency standards and measures to recycle and minimise water consumption in all new development across High Peak. Policies EQ1 and S7 specifically support the implementation of water efficiency measures in new residential development within the Buxton Sub-area. The policies state that new residential development should achieve water efficiency of 110 litres per person per day. This is the more stringent 'optional' technical Building Regulations standard for water efficiency in recognition of the sensitivities of the water environment in Buxton.
- 6.1.2 Policy EQ 1 also seeks the achievement of good BREEAM standards in non-residential development over 1,000m<sup>2</sup> unless it can be demonstrated that it is not technical feasibility or financially viable (BREEAM incorporates measures of water efficiency in non-residential development as one of a range of sustainable design factors).

### 6.2 Water efficiency in residential development

- 6.2.1 The policy requirement for higher standards of water efficiency aims to reduce the phosphate load on the River Wye to meet targets established through the WFD and Habitats Directive to meet the protected areas objectives in the Humber River Basin Management Plan (2015);<sup>28</sup> and support the achievement of greater sustainability of water resources (in line with climate change elements of the rest of the policy). The Council therefore expects that new residential development complies with the policy requirement.
- 6.2.2 The achievement of 110 litres per person per day in residential development would achieve around a 20% reduction in the amount of water discharged to wastewater treatment works compared to the average water efficiency of around 143 litres per person per day<sup>29</sup>. The reduced flow of wastewater also reduces the flow of water through sewerage piping and connections which can support the efficiency of the system and reduce the number of leaks.
- 6.2.3 A reduction in water usage does not lead to a directly equivalent reduction in phosphate load in rivers. The achievement of improved water efficiency would reduce the stress on the sewerage system, indirectly contributing to phosphate reduction in the River Wye and thereby reducing negative impacts on the ecological status of the Peak District Dales SAC.

### 6.3 How new homes in Buxton can achieve a water efficiency of 110 litres per person per day

- 6.3.1 The incorporation of water efficient appliances supports positive behaviours for occupiers. There are a range of water efficient appliances that should be considered when designing new residential development. These include:

<sup>28</sup> Environment Agency (2015) Humber River Basin Management Plan. Available via:

<https://www.gov.uk/government/publications/humber-river-basin-district-river-basin-management-plan>

<sup>29</sup> Discover Water (2019) Data for England and Wales Apr 2018–March 2019. Available via:

<https://discoverwater.co.uk/amount-we-use>

- **Water efficient shower heads** which use technology that can produce water flows that feel far higher than they are;
- **Reduced-capacity baths** can support behaviour that reduces the amount of water used for baths;
- **Lower flow taps;**
- **Low flush and dual flush toilets;**
- **Water efficient dishwashers and washing machines.** The installation of water efficient appliances supports the use of less water and less produced as wastewater. The *Waterwise Marque* provide recommendations on appliances that are water efficient.

6.3.2 Developers should investigate the integration of these appliances. Further guidance on can be found from including Waterwise ([www.waterwise.org.uk](http://www.waterwise.org.uk)) and the Energy Saving Trust ([www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)). Additionally, developers should explore the Good Practice guidance provided by the Association for Environment Conscious Building (AECB) ([www.aecb.net](http://www.aecb.net)).

## 6.4 Measures to recycle and minimise water consumption

### Water-sensitive design in new homes

- 6.4.1 Strategies that should be considered to ensure new homes are able to meet the required water efficiency targets include:
- Water-sensitive kitchens and bathrooms go beyond efficiency to consider the material contents of these rooms and how they are used. In a water-sensitive bathroom, the shower might be replaced by a splash wash or a tilting bathtub, and the toilet fitted with a sink-to-cistern connection or an air-flushing unit.
  - Water-sensitive gardens are outlined within the RHS's Gardening for a Changing Climate (2017)<sup>30</sup>. Garden design can help ensure that water usage is kept to a minimum and lessens the need for the use of hosepipes by ensuring the gardens are suitably designed to ensure maximum water retention.
- 6.4.2 It is expected that developers will signpost guidance for occupiers to encourage more efficient use of water.

### Rainwater Harvesting

- 6.4.3 Rainwater harvesting is the re-use of water collected from roofs via traditional guttering, through down pipes to an underground tank(s) which would be possible in many areas in Buxton. There are a variety of systems that can be employed to harvest rainwater but typically the harvested water is delivered on demand by an in-tank submersible pump directly to toilets, washing machines and outside taps.
- 6.4.4 Developers need to consider the possibilities of re-using and recycling surface water in as many ways as feasible. The safe implementation of water recycling can help to reduce the amount of phosphate and nutrients to surface waters, as well as conserving potable, drinking water, thereby providing economic and social benefits to communities (through reduced water bills) and supporting sustainable ways of living.

<sup>30</sup> Available from: <https://www.rhs.org.uk/science/gardening-in-a-changing-world/climate-change>

- 6.4.5 The Environment Agency has provided guidance on the regulatory position regarding rainwater harvesting which should be consulted before any systems are employed.<sup>31</sup> Typically, residential systems will not require a licence from Environment Agency. Applicants seeking to install non-residential systems should consult the Environment Agency.

## Water Recycling

- 6.4.6 Greywater is typically defined as being wastewater from baths, showers, washing machines and sinks. It is estimated that this accounts for between 50% and 80% of a household's wastewater (as opposed to 'potable water' which enters the house and is safe to drink).
- 6.4.7 Greywater can be used for flushing toilets, watering plants and washing clothes. The re-use of greywater can support a reduction in the amount of waste water leaving the house, and therefore the amount of water required and the amount of water requiring treatment at wastewater treatment works (WwTW), supporting a reduction in phosphate load.
- 6.4.8 Methods for greywater recycling include direct use, biological systems and mechanical filters. Typically, greywater reuse is more expensive than rainwater harvesting and requires that safeguards are in place to avoid pollutants entering surface waters.
- 6.4.9 Developers should explore opportunities to integrate water recycling into the design of new residential and non-residential development.
- 6.4.10 Rainwater harvesting and water recycling may fall under the Private Water Supply Regulations 2016 and 2018 (Amendment) Regulations and appropriately qualified persons should be consulted regarding the implications.

## 6.5 How the water efficiency standard for residential development will be applied by the Council in Buxton

- 6.5.1 Local Plan Policy EQ 1 states that new residential development in Buxton sub-area should meet the water efficiency standard of 110 litres per person per day.

### Viability

- 6.5.2 The implementation of water efficiency measures should not in most cases have an undue effect on the cost of development. Defra's Water Conservation Report (2018)<sup>32</sup> states that *"In many cases efficiency can be achieved at little cost to developers. Requiring all developers to build to the lower standard of 110 litres per person per day would only cost a maximum of £9 additional per dwelling"* (pg.3).
- 6.5.3 To demonstrate compliance with Policy EQ1, developers will be expected to clearly explain what measures they are going to implement and justify that the development is not viable if water efficiency measures are not proposed to be implemented. Given the ability of developers to integrate such measures at the earliest stages of design and specification, the Council considers that most residential development will be able to implement the water efficiency measures required to meet or exceed the target of 110 litres per person per day.

<sup>31</sup> Environment Agency (2019) Rainwater harvesting: regulatory position statement. Available via: <https://www.gov.uk/government/publications/rainwater-harvesting-regulatory-position-statement/rainwater-harvesting-regulatory-position-statement>

<sup>32</sup> Defra (2018) Water conservation report: action taken and planned by government to encourage the conservation of water. Available via: <https://www.gov.uk/government/publications/water-conservation-report-2018>

## Application of the water efficiency standards

- 6.5.4 The Council will apply a planning condition(s) to all consented applications for new residential development in Buxton to ensure that the development implements the water efficiency measures required in the Local Plan. Each planning permission will include a condition that will reference the requirement to meet regulation 36(2)(b) of Part G2 of the Building Regulations 2015 (as amended). In line with Policies EQ 1 and S7 this applies to new residential development in the Buxton Sub-area where higher standards of efficiency are sought through the Local Plan. See template conditions provided in Appendix C.
- 6.5.5 Approved Document G (2015 edition) sets out the regulatory requirements and guidance on achieving this option within the Regulations. Appendix A of Approved Document G provides a Water Efficiency Calculator which aids achievement of these standards<sup>33</sup>. This water efficiency calculator should be used to inform design of new residential development.
- 6.5.6 The Council encourages all developers to seek the highest levels of water efficiency in new residential development and is willing to work with applicants who seek to voluntarily deliver greater efficiency than required by Policies EQ1 and S7.

## 6.6 How high standards of water efficiency and measures to recycle and minimise water consumption in non-residential development will be sought by the Council

- 6.6.1 Policy EQ 1 supports the integration of high water efficiency standards and measures to recycle and minimise water consumption in all development. Policy S7 reaffirms that this applies within the Buxton sub-area. The Council encourages applicants for all non-residential development to explore water efficiency measures that could be incorporated at the earliest stages of design. The use of water efficient fittings and fixtures and appliances; water monitoring; water leak detection; rainwater harvesting and greywater recycling should be thoroughly explored.

### BREEAM standards and water efficiency for non-residential developments

- 6.6.2 Under EQ 1 the Council requires BREEAM 'good' standard as a minimum for non-residential buildings over 1,000m<sup>2</sup> subject to technical feasibility and financial viability. BREEAM incorporates water efficiency as one of the measurements for achieving the overall standard. At the application stage applicants should provide the design stage BREEAM assessment as part of the Design and Access Statement and demonstrate why the approach to water efficiency has been chosen. Alternatively, applicants are encouraged to set out clear justification for not achieving at least a 'good' standard.
- 6.6.3 The Council will apply a condition to new non-residential development over 1,000m<sup>2</sup> to meet the BREEAM 'good' standard as a minimum for water usage (unless it has been demonstrated that the requirement is not technically feasible or financially viable). See template conditions provided in Appendix C.
- 6.6.4 The Council encourages all applicants to explore BREEAM (and its water efficiency standards) for new non-residential developments under 1,000m<sup>2</sup>.

<sup>33</sup> The Water Efficiency Calculator is available via:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/504207/BR\\_PDF\\_AD\\_G\\_2015\\_with\\_2016\\_amendments.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/504207/BR_PDF_AD_G_2015_with_2016_amendments.pdf)



Please note that the weblinks to other guidance and resources provided in the SPD are correct at the time of publication. However, the Council recognises that weblinks may change over time. Please contact the Council should you struggle to find a resource that has been identified.

# Appendix A Code of Practice - Drilling of Boreholes in the Vicinity of Buxton Thermal Springs



# Appendix B Code of Practice – Excavations in the Vicinity of Buxton Thermal Springs

# Appendix C

## Template planning conditions related to water issues

### Water efficiency and supply

The dwelling(s) hereby permitted shall incorporate water efficiency measures to achieve usage of no more than 110 litres of water per person per day under regulation 36 2(b) set out in part G2 of the 2015 Building Regulations. No occupation of [any of] the dwelling[s] shall take place until a Building Regulations assessment confirms that the development has been constructed in accordance with regulation 36 2(b) of part G2 of the Building Regulations for water efficiency and has been submitted to and agreed in writing by the local planning authority.

No development shall commence on site until details of the works for the provision of water for domestic use have been submitted to and approved in writing by the Local Planning Authority. No dwelling shall be first occupied until the approved water supply details have been fully implemented in accordance with the approved plans. Should water for domestic use be provided by a private water supply (i.e. not provided by a statutory water undertaker) no dwelling shall be first occupied until a risk assessment of the supply has been submitted to and approved in writing by the LPA, to determine its suitability and sufficiency.

No development unless a method statement has been submitted to and approved in writing by the Planning Authority, detailing all mitigation measures to be delivered to secure the quality, quantity and continuity of water supplies to properties which are served by private water supplies at the date of this consent and which may be affected by the Development. The method statement shall include water quality sampling methods and shall specify abstraction points. The approved method statement shall thereafter be implemented in full.

No occupation of [any of] the development shall take place until an accredited Post Construction stage BREEAM assessment which confirms that the development has been constructed in accordance with the BREEAM score for water usage required in the planning permission has been submitted to and agreed in writing by the local planning authority.

### SuDS

No works on site shall commence until a detailed drainage scheme (to include the disposal of surface water by means of sustainable methods of urban drainage systems) has been submitted to and approved in writing by the Local Planning Authority. The development shall only be implemented in accordance with such approved details.

No dwelling hereby permitted shall be occupied until a sustainable drainage scheme for foul and surface water drainage from the site has been completed in accordance with the approved details. The sustainable drainage scheme shall be retained, managed and maintained for the lifetime of the development in accordance with a management and maintenance plan submitted to and approved in writing by the local planning authority.

The development shall not begin until details of a scheme for separate foul and surface water drainage, including any balancing works or off-site works, have been submitted to and approved in writing by the Local Planning Authority. Surface water must first be investigated for potential disposal through use of sustainable drainage techniques and the developer must submit to the Local Planning Authority a report detailing the

results of such an investigation together with the design for disposal of surface water using such techniques or proof that they would be impractical. The scheme would also be required to demonstrate that there is no resultant unacceptable risk to controlled waters. The scheme so approved shall thereafter be implemented in full before the first occupation of the development.

Prior to the commencement of development details of surface water drainage works shall be submitted to and approved in writing by the Local Planning Authority. Before these details are submitted an assessment shall be carried out of the potential for disposing of surface water by means of a sustainable drainage system and the results of the assessment provided to the Local Planning Authority. Where a sustainable drainage scheme is to be provided the submitted details shall:

- i) provide information about the design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters;
- ii) include a timetable for its implementation; and
- iii) provide a management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime.

Prior to the occupation of the buildings hereby approved the surface water drainage works shall be carried out and the sustainable urban drainage system shall thereafter be managed and maintained in accordance with the agreed management and maintenance plan

No infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approval details.

### Basements and excavations

Excavation must take place in accordance with the approved desk study, risk assessment and method statement for excavation (doc refs) prepared in line with the Council's Code of Practice: Excavations in the Vicinity of Buxton Thermal Springs. The excavation works shall be undertaken in accordance with the approved method statement.

If piling is necessary, a written method statement shall be submitted to the Local Planning Authority. This method statement should be in line with the following:

- Environment Agency guidance (Environment Agency (2001), Piling and Penetrative Ground Improvements on Land Affected by Land Contamination NC/99/73.
- HPBC Code of Practice: Excavations in the Vicinity of Buxton Thermal Springs
- HPBC Code of Practice Drilling of Boreholes in the Vicinity of Buxton Thermal Springs

The effects of noise generation (hours of operation) should also be considered and should include noise mitigation measures consistent with best practical means. No piling shall take place until the method statement has been approved.

No development shall take place before detailed drawings of all existing and proposed underground works, including foundations, drainage and those of statutory undertakers, have been submitted to, and approved in writing by, the Local Planning Authority. Such details shall include the location, extent and depth of all excavations and these works shall be carried out and completed in accordance with the details as approved.

Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) Order 1995 (or any Order revising, revoking and re-enacting that Order with or without modification), there shall be no enlargement or extension of the dwelling(s) hereby permitted, including basement development, without the prior written approval of the Local Planning Authority.

### Fuel/Chemical Storage

No development shall take place before a scheme for the construction of storage facilities for oils, fuels or chemicals has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved scheme and be thereafter maintained.

### Sewage

None of the [dwellings/buildings] hereby approved shall be occupied until works for the disposal of sewerage have been provided on the site to serve the development hereby permitted, in accordance with details to be submitted to and approved in writing by the Local Planning Authority.

## Appendix D

# Location of the Peak District Dales Special Area of Conservation

This plan shows the location of the Peak District Dales Special Area of Conservation (SAC) and other designated nature conservation sites in the Buxton and wider area. The plan is correct at the time of adoption of the SPD but is subject to change. Applicants should use the latest mapping data from Natural England where necessary.

