

Appendix 14.6: Private Water Supply Assessment

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1 Introduction

This Private Water Supply (PWS) Assessment is an Appendix to **Chapter 14: Hydrology, Hydrogeology and Peat** and has been prepared by Fluid Environmental Consulting (Fluid) on behalf of the Applicant to support the Environmental Statement for Scout Moor Wind Farm II (the 'Project for Assessment'). The Assessment Boundary (**Figure 14.1: Hydrological Setting** of the ES) is located in the South Pennines, between Rawtenstall and Rochdale in North West England. Access to the Assessment Boundary is proposed via the A56 / A680, followed by minor roads to the west of the Assessment Boundary.

The Project for Assessment will comprise 12 wind turbines, with a blade tip height typically of 180 m, associated infrastructure and ancillary development.

This assessment covers an area including the Assessment Boundary of the Project for Assessment and a surrounding ~1 km buffer area where hydrological connectivity to the Assessment Boundary is possible. This is referred to as the PWS study area.

1.1 Environmental Context

The Assessment Boundary consists mainly of open moorland, historically used for sheep grazing. It is situated within the South Pennines, with areas of upland heath and peatland. The existing Scout Moor Wind Farm lies west of the Assessment Boundary. A review of Ordnance Survey mapping and aerial imagery (Google, 2026) indicates that the Assessment Boundary is located on the slopes south of Cowpe and north of Ashworth Moor, reaching a high point of 477m above Ordnance Datum (AOD) at Tottington Higher End Moor. Much of the Assessment Boundary consists of a gently sloping summit-like plateau at the top of surrounding slopes.

The geology of the Assessment Boundary comprises bedrock from the Upper Haslingden Flags, Rossendale Formation, Pennine Lower Coal Measures Formation, and Woodhead Hill Rock. The Pennine Lower Coal Measures Formation and Woodhead Hill Rock, found predominantly in the northern and southern areas, are composed of interbedded grey mudstone, siltstone, sandstone, and coal seams. These units generally have low primary permeability due to the fine-grained nature of mudstones and siltstones; however, sandstone layers may allow limited groundwater movement where fractures are present. The coal seams and associated mining legacy within the Coal Measures Formation may create secondary permeability, providing preferential flow pathways for groundwater via historic underground mine workings and fractures.

The eastern, western, and parts of the central areas of the Assessment Boundary are underlain by the Upper Haslingden Flags and Rossendale Formation. The Upper Haslingden Flags comprises more competent sandstone and flaggy beds, with relatively high permeability due to both matrix flow and fracturing and thus contributes more readily to groundwater recharge. In contrast, the Rossendale Formation contains a greater proportion of siltstone and mudstone, making it generally less permeable, though localised fractures may still allow some limited groundwater movement.

Superficial deposits across the Assessment Boundary are of Quaternary age and include significant areas of peat, with a small area of Diamicton Head. Peat deposits, found in several relatively large patches across the Assessment Boundary, are typically of low permeability in deeper, more humified layers, resulting in high surface water retention and limited recharge to the groundwater system. Where peat is shallower or more fibrous, higher permeability may

occur locally. Diamicton Head is a poorly sorted glacial deposit with low permeability, generally resulting in surface runoff rather than infiltration.

Overall, the Assessment Boundary's hydrogeological behaviour reflects a mix of low-permeability superficial cover and fractured sandstone bedrock, with locally enhanced groundwater flow potential where historical mining has created subsurface conduits.

The Assessment Boundary features a drainage network with multiple minor watercourses flowing towards reservoirs and larger river systems. In the east, surface water drains towards Spring Mill Reservoir via Fern Isle Brook, Prickshaw Brook, and their tributaries, along with a smaller unnamed watercourse south of Fern Isle Brook. The central southern area drains to Naden Upper Reservoir, with flow routes including Naden Brook, Little Ding, Ding Clough, and an additional unnamed watercourse to the east of Ding Clough. A small portion of the southwest drains towards Scout Moor High Level Reservoir via a minor watercourse along the Assessment Boundary. In the northern central part of the Assessment Boundary, drainage occurs towards Greens Clough via Well Clough, which ultimately discharges into the River Irwell to the north.

The more isolated properties in close proximity to the Assessment Boundary are not likely to be on mains water supply, particularly where they are located at higher elevations or away from the main public roads and therefore are likely to be reliant on private water supplies.

1.2 Scope of Works

The purpose of this PWS Assessment is to:

- Identify any properties and their associated water supplies that could have a hydrological or hydrogeological link to the Project for Assessment;
- Obtain specific information on water supply sources, conveyance and storage infrastructure that could potentially be connected to the Assessment Boundary;
- Ascertain the risk to any of these PWS as a result of construction and operation of the Project for Assessment;
- Use these details to inform the layout design; and
- Where appropriate, provide recommendations for potential mitigation measures.

1.3 Limitations

The information in this document is based on the list of properties with registered PWSs provided by the Applicant (Cubico UK Development (Wind 1) Ltd), a review of Ordnance Survey (OS) and aerial imagery mapping, and site visits conducted in February 2025. Local councils did not provide extensive lists of properties with PWS, so it is possible that some PWS have not been accounted for. The Applicant is committed to collating PWS information and assessing appropriately prior to planning determination. This assessment is considered to be as accurate as possible at this stage.

1.4 Legislation, Policy and Guidance

The main legislative drivers, relevant to the assessment are:

- **The Private Water Supplies (England) Regulations 2016¹:**

These regulations aim to ensure the provision of clean, safe drinking water, delivering significant health benefits to those using private water supplies.

Local authorities are responsible for enforcing and regulating private water supplies, including conducting risk assessments and regular monitoring.

- **The Water Supply (Water Quality) Regulations 2016²:**

These regulations set standards for water quality to ensure that water supplied for domestic or food production purposes is wholesome.

They apply to water companies and private suppliers, outlining requirements for sampling, testing, and maintaining water quality.

- **The Environment Agency's Approach to Groundwater Protection³:**

This guidance outlines the Environment Agency's position on protecting groundwater from pollution and over-abstraction.

It serves as a framework for assessing risks to groundwater and provides best practices for managing activities that may impact groundwater quality and quantity.

2 PWS Assessment Methodology

The PWS Assessment has been undertaken based on the following methodology:

- Completion of a high-level desktop assessment to put the hydrological and hydrogeological setting of the Project for Assessment into context;
- Consultation with the local authority and the Applicant to gather and review existing records of water supply sources within the vicinity of the proposed development infrastructure;
- Completion of site visits of properties closest to the Project for Assessment where data gaps were identified, where confirmation was required for locations of supply sources or where residents had requested a visit; and
- Conceptualisation of the potential surface or groundwater flow paths between the potential source (proposed infrastructure) and the receptor (the private water supply abstraction location).

¹ **The Private Water Supplies (England) Regulations 2016** – Available at: <https://www.legislation.gov.uk/ukxi/2016/618/contents> (Accessed April 2025).

² **The Water Supply (Water Quality) Regulations 2016** – Available at: <https://www.legislation.gov.uk/ukxi/2016/614/contents> (Accessed April 2025).

³ **Environment Agency (2018). The Environment Agency's Approach to Groundwater Protection** – Available at: <https://assets.publishing.service.gov.uk/media/5ab38864e5274a3dc898e29b/Environment-Agency-approach-to-groundwater-protection.pdf> (Accessed April 2025).

2.1 Desk Based Assessment

The desk-based assessment reviewed information from several secondary sources to build up a hydrological and hydrogeological context for the Project for Assessment and the surrounding area. These included:

- Geological and hydrogeological information obtained from The British Geological Survey to understand hydrogeological conditions throughout the area considered for assessment; and
- Mapping of surface water catchments and sub-catchments to determine potential hydrological connectivity to the Project for Assessment.

Details of the existing Assessment Boundary conditions can be found within **Chapter 14: Hydrology, Hydrogeology and Peat** of the ES.

A historical record of a water well (Ref: SD81/3) is noted at Cowpe Moss, located within the Assessment Boundary at approximate coordinates E384400, N419390. The well is listed in the BGS database but lacks associated detail regarding depth, construction, hydrogeological testing, or water chemistry, and there is no visible or documented infrastructure currently associated with it. While the available information is limited, the presence of this feature will be considered further at a later stage of the assessment to determine any relevance to the current private water supply review.

• Consultations

Consultations were undertaken with the Applicant, the Environment Agency (EA) and the local councils (Rossendale Borough Council and Rochdale Metropolitan Borough Council).

Cubico

The Applicant recognises that the potential for effects on PWS is a key concern for local residents based on the feedback received during public consultation. In order to obtain as much information as possible a request was issued in conjunction with public exhibitions for the provision of any available PWS information to be provided. The Applicant collated the names and addresses of residents who responded which are discussed below.

The Applicant provided a list of concerned residents from Cowpe, who raised various issues regarding the potential impacts of the Project for Assessment on their water supplies, primarily sourced from spring water. Their main concerns included:

- **Water Supply Disruption:** Several residents expressed concerns that construction activities could disturb or contaminate their spring water sources, citing similar issues during the Scout Moor Wind Farm development. There were also concerns about the cost and impact of restoring water infrastructure in case of disruption.
- **Proximity to Turbines:** Some residents were worried about the proximity of the turbines to their spring water sources.

Fluid met with the concerned residents in Cowpe and visited the spring supply during the February 2025 site visit to understand their concerns and evaluate the potential impacts.

The Applicant also provided details of a property located on New Road to the east of the Assessment Boundary. The water supply for the farm comes from a mineshaft source. Fluid visited this property and assessed the water source during the site visit.

A resident of Knacks Farm also contacted the Applicant about their intention to drill a borehole for water supply located over 1.4km to the south east of the nearest proposed infrastructure. Although no information has been provided at this stage the location has been assessed for potential hydrological connection.

Environment Agency (EA)

A Freedom of Information (FOI) request was submitted to the Environment Agency (EA) to obtain details of any registered water abstractions within the Assessment Boundary and a 2km radius of the boundary. The request specifically sought:

- **Location of the source** (surface water, groundwater, borehole, spring, etc.).
- **Type of source.**
- **Abstraction volumes.**
- **Intended use.**
- **Properties or businesses utilising the abstraction.**

The EA provided water abstraction licence data for a 6km radius around SD 85674 19039 under the Environment Agency Conditional Licence. However, this data is subject to usage restrictions, including limits on sharing public water supply abstraction locations (minimum 1km² resolution) and internal reporting constraints (maximum 100km² coverage per report). Additionally, the dataset may not capture all abstractions, as small abstractions (less than 20m³/day) are not licensed. The data reflects information available at the time of preparation (December 2024) but may not account for recent licence renewals or amendments.

No relevant live private water supply (PWS) licences were included in the data provided. This means there may be unaccounted-for abstractions in the study area, and additional data verification may be required in the next phase of works.

The Local Councils

A Freedom of Information (FOI) request was submitted to Rossendale Borough Council and Rochdale Metropolitan Borough Council to obtain details of registered water abstractions within the Assessment Boundary and a 2km radius. The request sought information on source location, type, abstraction volumes, intended use, and associated properties or businesses.

Rossendale Borough Council and Rochdale Metropolitan Borough Council responded that they do not hold this information. Where they did have relevant data, it was withheld under Section 40(2) of the Freedom of Information Act, which protects personal data from disclosure. As a result, there may be unrecorded abstractions within the study area that will require further works in the next phase.

Desk Based Review

Information provided was reviewed, together with OS mapping and aerial imagery to identify properties potentially reliant on private water supplies within the potential catchments of the Assessment Boundary and any potential data gaps where further investigation was required.

2.2 Site Visits

A site visit was carried out in February 2025 to visit the two properties identified as using a PWS that are potentially hydrologically connected to the proposed infrastructure as shown on **Figure 14.5**. Visits were undertaken to the properties and residents interviewed to obtain information regarding their supply in accordance with the details presented on the example PWS questionnaire provided in **Annex II**.

Where possible, the locations of the PWS source were viewed, photographed and an accurate GPS grid reference was taken. Information was also gathered, where known, on the water supply system, such as tanks, pipelines, treatment systems and quantity and quality from the residents where relevant. Much of this detail is not provided within this report as it is only relevant where supplies are connected to the Project for Assessment.

3 Private Water Supply Details

The findings of the site visits are summarised below:

- **Cowpe Residents:**

The residents of Cowpe that were spoken to are all supplied by a single spring source located at grid reference 383296, 420345. The spring has provided a consistent water supply for many years, although the local council recently informed residents that the water must be treated before use due to the water quality. The spring source is situated approximately 700 m uphill to the south of the properties.

- **Stewart Farm (New Rd):**

The Stewart family farm, located on New Road, is supplied by a mining adit that is open at the surface. The water is directed along a long open ditch of approximately 1.2km in length cut into the soil to a chamber and then piped to the property. The water source (386400, 418451) is exposed until it reaches the chamber which allows surface runoff and other contaminants to enter. The water on emergence from underground shows signs of acid mine drainage which can contain high concentrations of heavy metals and is unsuitable for drinking without treatment. The family has recently been informed by the Local Council that the water needs to be treated before use. Currently, the residents are boiling the water for domestic use and drinking bottled water.

The source is situated approximately 1.2 km upslope from the property (**Figure 14.5**). During the site visit, the property owner mentioned that she suspected others downstream may also be using the same source, but this could not be confirmed at the time of the visit. Further consideration of potential downstream users will be undertaken.

- **Knacks Farm (Knacks Lane, Lanehead):**

A desk-based review was undertaken to assess the potential for hydrological or hydrogeological connectivity between the proposed development and Knacks Farm, where the landowner has indicated plans to install a new borehole. The property is located over 1.4 km from the nearest proposed wind farm infrastructure and lies within a separate surface water catchment, with no direct hydrological connection to the development area, the infrastructure is within the Spring Mill reservoir sub-catchment, whereas the borehole is within the wider River Spodden catchment.

Geological mapping indicates that the bedrock formations between the infrastructure and Knacks Farm consist of the Darwen Flags (sandstone) and the Pennine Lower Coal Measures Formation (PLCM), both of which are classified as moderately productive aquifers. These formations are known for their cyclic multi-layered nature, comprising sandstones interbedded with mudstones. The presence of the mudstone layers is likely to inhibit groundwater flow over long distances, further reducing the potential for any hydraulic connectivity.

Structural geological features, including faults, are present in the area. Fault mapping indicates that the faults in question dip southward toward Knacks Farm if extended from the infrastructure area. However, despite this apparent alignment, the combination of the significant separation distance (1.4 km), the moderate permeability of the bedrock, and the presence of lower permeability mudstone layers means that the likelihood of any substantial hydrogeological connection is considered to be very low.

The landowner also mentioned other nearby properties may also utilise private boreholes and the conceptualisation above applies more broadly to this whole area and not just to Knacks Farm. The combination of geological, structural, and spatial factors collectively supports the conclusion that there is a very low risk of impact from the development on any nearby private water supplies in this area.

4 Private Water Supply Assessment

4.1 Assessment Methodology

A methodology for risk assessment of private water supplies is contained within the Private Water Supplies Technical Manual. Due to the nature of the works being carried out for the Project for Assessment, it was deemed impractical to use the methodologies set out in this guidance as this would have required taking into account factors such as: proximity of the supply to cattle and wildlife, historical and current land use and historical maintenance carried out on the supply. While such factors will be important for determining the baseline qualities of the supply, they are inappropriate for determining the risk to the private water supplies posed from the construction, operation and decommissioning of the Project for Assessment.

The methodology adopted is based on Fluid Environmental Consulting's extensive experience of assessing risks to PWS from wind farm developments, however, the guidance has been utilised where possible when trying to establish the varying factors which influence the baseline conditions of the supplies.

The assessment considered the type of hazard associated with the Project for Assessment, release and exposure potential and severity of impact.

The Source-Pathway-Receptor conceptual model has been used as the underlying transfer mechanism to assess the risk posed by the construction, operational and decommissioning activities. In this model:

- **Source** - refers to the source of the potential risk hazard;
- **Pathway** - refers to the mechanisms by which the hazard is transmitted to the receptor; and

- **Receptor** - refers to anything or anyone that could be adversely affected by the hazard (including supply source and associated infrastructure).

Where hydrological connectivity or linkage exists between a potential contamination source and the receptor by means of a pathway, then a pollutant linkage and associated risk exists. Where there is no pollutant linkage, for example a PWS source is not within a catchment of the Project for Assessment, there will be no associated risk. This screening allows the assessment to focus on supplies that are hydrologically or hydrogeologically connected to the Project for Assessment.

The hydrogeological 'catchment areas' are likely to be similar to the surface water catchments and therefore bound by the same topographical restrictions. The methodologies for this qualitative assessment are based on a worst-case scenario and try to determine the greatest possible impact the Project for Assessment will have on the quality and quantity of water serving the supply. As the direction of groundwater flow cannot be accurately assessed without detailed site investigations, it is assumed that the groundwater flow is in the direction of each supply source based on the topographical and hydrogeological regime.

The risks to the hydrological and hydrogeological environment during construction vary based on the location of each source and how that source is fed i.e. groundwater spring, borehole or surface water abstractions. As a result, the assessment of risk of contamination to PWS due to activities associated with the construction works will consider the following:

- Type of private water supply and likely disruption potential;
- Distance from water source and known supply infrastructure to the nearest point of construction associated with the Project for Assessment; and,
- Position of the source in relation to the construction works in terms of topography and catchment influence zones.

The assessment considers the type of hazard associated with the Project for Assessment, the probability or likelihood and severity or magnitude of an impact occurring, based on topographical and hydrological relationships between the supply. This is consistent with the assessment of impacts as detailed within **Chapter 14** of the ES.

4.2 Receptors

The receptors refer to anything or anyone that could be adversely affected by the hazard (including supply source and associated infrastructure).

The two PWS are used for domestic supply, including potable drinking water supply, and for livestock. It is understood that not all properties with a domestic water supply choose to drink the water and used bottle water supply for drinking water.

As a conservative approach it is assumed that all identified PWS are used for domestic potable supply (drinking water) as they have a right to access the water supply for this purpose and human consumption is the most sensitive receptor category.

4.3 Screening of Supplies

The initial desk-based review of potential properties reliant on PWSs identified two PWSs potentially linked to the Assessment Boundary.

A screening assessment was then completed on the two supplies following receipt of the information provided by the residents both from questionnaires and site visits. The screening was based on the source of the PWS in relation to the disturbed areas that would be associated with the Project for Assessment in order to eliminate any sources that would not be hydrologically or hydrogeologically connected.

The screening exercise excluded properties where inconceivable hydrological or hydrogeological connectivity is likely to exist. These were determined through considering the following:

- Catchment boundaries and channel networks;
- Properties of the underlying superficial and bedrock geology;
- Dominant land use;
- Topographical considerations; and,
- Proximity to infrastructure (100m where excavations will be less than 1m depth and 250m where excavations will be greater than 1m depth buffers for groundwater sources).

The locations of the PWS sources and their associated catchments based on the topography and the hydrogeological regimes are shown on **Figure 14.5** and detailed and screened in **Table 1** in **Annex I**.

5 Risk Assessment of PWS Potentially Connected to the Project for Assessment

The two private water supplies that have been identified and are in potential hydrological connection to the proposed infrastructure:

PWS1 Cowpe Residents Supply

Hydrologically, the source, a spring, is not within the Assessment Boundary, and is unlikely to be connected to infrastructure as it is separated by a topographical divide as shown in **Figure 14.5**.

It is possible that there is a potential hydrogeological connection however this is considered unlikely due to:

- The distance between any infrastructure and the spring source (~700 m) – this exceeds the 250 m threshold commonly used as a screening criterion in England to assess potential risk to private water supplies. While there is no absolute legal setback distance, regulators such as the Environment Agency consider activities beyond 250 m from a spring source to be low risk, particularly when combined with other mitigating factors such as geological setting, low permeability formations, and topographical separation. This approach aligns with best practice for groundwater protection outlined in the Environment Agency's *Approach to Groundwater Protection* (2018) and their guidance on Source Protection Zones.
- The geological setting – The formations underlying the nearest proposed infrastructure comprise a sequence of interbedded mudstone and siltstones with named sandstone units of the Rossendale Formation. Specifically, the moderately permeable Upper Haslingden Flags sandstone lies beneath the closest infrastructure (T15) and in turn

overlies lower permeability mudstone and siltstone units. The spring in question emerges from within this mudstone and siltstone sequence, not at the contact with the more permeable sandstone unit above, but midway through the lower permeability strata.

While it is theoretically possible for groundwater to migrate laterally along bedding planes, the likelihood of a hydrological linkage from the infrastructure to the spring is considered very low due to a combination of factors:

- The low permeability of the mudstone and siltstone layers would restrict lateral groundwater movement.
- The dip of the beds is shallow, which further limits the potential for downward directed flow towards the spring from the development area.
- No direct fracture or conduit pathway has been identified linking the proposed infrastructure location and the spring.
- The spring's emergence from mid-layer within the mudstone/siltstone sequence — rather than at a permeable boundary — suggests its source is more likely associated with a localised geological weakness, such as a fault or old underground mine workings.
- The distance between the proposed infrastructure and the spring is large so that any potential contaminant, although the release of any significant quantity is unlikely given good practice methods, would likely be attenuated before reaching the spring.

This interpretation is supported by the geological cross-section presented in **Plate 14.6.1** and related to the site-wide hydrogeological context shown on **Figure 14.4**. The cross section location is also shown on **Figure 14.4**.

- There is no proposed infrastructure within the same surface water catchment as the spring source and if the hydrogeological catchment did extend over the topographical divide the area of proposed infrastructure is small in comparison to the likely recharge area supporting the spring. Any potential effect from the proposed infrastructure on recharge will be insignificant as the crane hardstandings and tracks are semi-permeable and any runoff from the proposed infrastructure will be discharged to the surrounding land for infiltration.

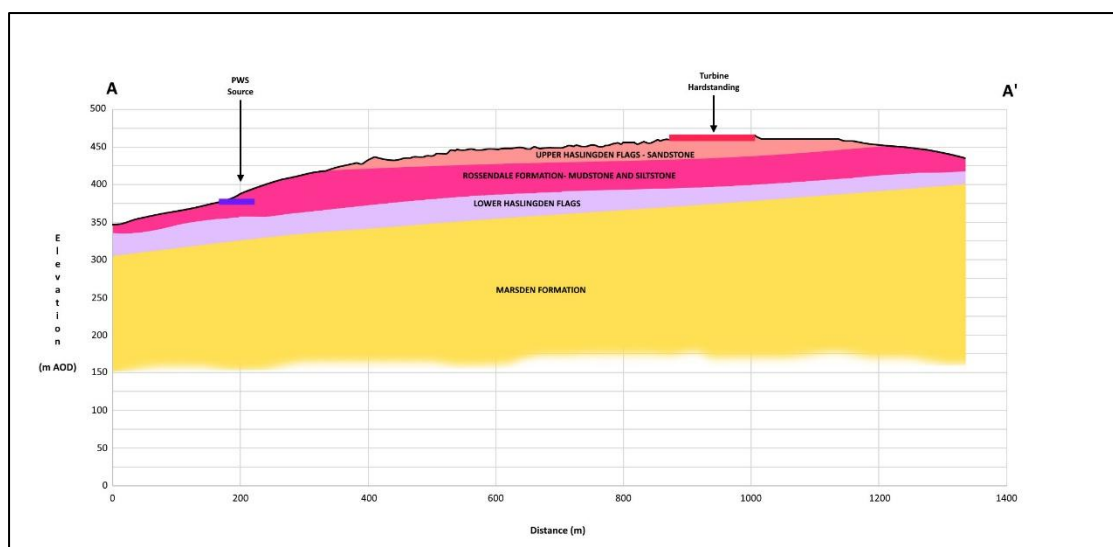


Plate 14.6.1 Hydrogeological cross section A – A'

PWS 2 Stewart Farm (New Rd) Supply

The water source at Stewart Farm appears to originate from an old mine shaft of unknown depth which suggests limited or no surface water connectivity. It is more than 250 m from any proposed development infrastructure (T3 and T4), and given its deep, sub-surface nature, it is unlikely to be hydrologically connected to the Project for Assessment.

The Assessment Boundary is underlain by the Pennine Lower Coal Measures Formation, which comprises interbedded mudstone, siltstone, sandstone, and coal seams. While the mudstone and siltstone layers are typically of low permeability, historical coal mining in this formation has likely enhanced secondary permeability through fracturing and old mine workings, which may be contributing to the groundwater source at Stewart Farm. Nonetheless, due to the depth and separation of the source, any risk of hydrological connectivity or adverse effect from the Project for Assessment is considered very low.

6 Conclusion

Given the rural nature of the Assessment Boundary, it was anticipated that some of the surrounding properties would be reliant on private water supplies (PWS), although the old mine and quarry workings and geological setting would indicate poor quality supplies would be likely. To assess this, private water supply records were obtained from the Applicant and reviewed alongside Ordnance Survey (OS) mapping and aerial imagery to identify properties potentially dependent on PWS connected to the Assessment Boundary.

Figure 14.5 shows the locations of identified PWS sources and their indicative catchments relative to proposed infrastructure.

All identified PWS are located:

- Over 100 m from access tracks requiring shallow excavations (<1 m), and
- Over 250 m from infrastructure requiring deeper ground disturbance.

Although there is no formal distance threshold in English guidance, the separation distances are consistent with general good practice in protecting PWS from construction effects, particularly for spring sources.

In addition, the geological setting (including widespread low-permeability mudstones and siltstones), shallow bedding dips, topographic divides, and likely absence of direct hydrogeological connectivity further reduce the potential for any significant interaction between development works and identified PWS.

It is therefore concluded, that although there may be some PWS that have not been identified in the assessment, they are unlikely to be impacted. This is due to the high likelihood of a lack of connectivity between any groundwater source >250m the site infrastructure; and that any surface water abstractions are unlikely due to the land use on site and poor water quality. Further investigation into potential other PWSs will however be undertaken prior to planning determination to identify and assess any other PWS.

Based on the available information, no significant impact on private water supplies is anticipated, however precautionary monitoring of supplies is recommended as outlined in **Chapter 14**.

Annex I

Private Water Supply Consultation and Site Visit Screening Summary

Table 1 Private Water Supply Consultation and Site Visit Screening Summary

PWS source ID	Property Name	PWS Source Type	PWS Source Location Grid Reference		Within Assessment Boundary	Potentially Connected to Infrastructure	Justification – Hydrogeological Regime	Comments on Supply
			Easting	Northing				
1	Cowpe Source	Spring-fed supply	383296	420345	No	No	The Cowpe spring source is located on the opposite far side of a hill from the construction area, within a separate surface water catchment, and is further buffered by topography. No development infrastructure is located within its recharge area. Due to this natural separation, the PWS is not at risk from the development and has been excluded from further investigation. The source is located approximately 700m upslope from the associated properties and over 900m from the nearest proposed development infrastructure.	Used for all domestic uses including potable supply. Property and source visited.



Figure 1: Source at PWS1 (Cowpe Residents)

PWS source ID	Property Name	PWS Source Type	PWS Source Location Grid Reference		Within Assessment Boundary	Potentially Connected to Infrastructure	Justification – Hydrogeological Regime	Comments on Supply
			Easting	Northing				
2	Stewart Farm (New Rd)	Mining adit source	386386	418444	Yes	No	The Stewart farm PWS is sourced from a mining adit that emerges at the surface and is then directed via a ditch to a chamber before being piped to the property. The source shows signs of orange acid mine drainage, indicating a likely deep groundwater origin with limited surface water interaction. The PWS is located approximately 1.2km upslope from the associated property and over 250m from the nearest proposed development infrastructure. Given its separation by distance and the absence of hydrogeological connectivity, the source is not at risk from the development and has been excluded from further investigation.	Used for domestic uses. Property visited. Exact orientation and shape of adit unknown.



Figure 2: Source at PWS2 (Stewart Farm)

Annex II

Example of Private Water Supply Questionnaire

Private Water Supply Questionnaire

2. Do you receive water from a private water supply (PWS)? Yes / No

3. Is the location of this PWS on land owned or occupied by you? Yes / No

If you are a tenant, please give name and address of the owner:

4. What is the location of the PWS? (please supply a grid reference if you know it, or indicate on the attached map if preferred)

5. What sort of supply is it? (e.g., borehole/well, collection facility)

6. Is the source of the supply:

groundwater

surface water

a spring (please tick one)

7. If there is a borehole/well:

How deep is it and what is its diameter?

When was it installed?

8. If there is a collection facility please give details of any drains feeding the collection tank.

9. Please provide details of any pumps used.

10. Please provide any other information about the source of the water or nature of the collection facility not covered above.

11. Do you have facilities for storing water and to what capacity?

12. Does the supply have seasonal variation in flow and has it been known to dry up? Please provide details.

13. Does the water undergo any form of treatment? (e.g., filter, UV, ozone, chlorination)

14. Please provide details of any maintenance or inspection routines carried out on the supply?
15. Do you maintain any water quality records and have there ever been any problems with the quality or clarity of the water?
16. What is the water used for (e.g. drinking water, house supply, livestock, irrigation), and how much water is required for each different usage?
17. Please list any other properties, if any, which also use this PWS.
18. Please give any details you know of other PWS in the area.
19. Please give any further information not covered in this questionnaire that might help in this investigation (continue on a separate sheet if necessary).

Name:

Date:

Address:

Tel No:

The information provided in this questionnaire will be used solely for the purposes of the Lynemore Wind Farm water supply assessment and will be treated with confidentiality.