TA 9.2: Groundwater Dependent Terrestrial Ecosystems (GWDTEs)

Technical Appendix 9.2: Groundwater Dependent Terrestrial Ecosystems (GWDTEs)

1.1 Introduction

1.1.1 This Technical Appendix provides a summary of Groundwater Terrestrial Ecosystems (GWDTEs) within the context of the Proposed Development. This Technical Appendix provides a description of geological and hydrogeological conditions underlying the Site. Characterisation of the Proposed Development area takes into account National Vegetation Classification (NVC) surveying carried out by Avian Ecology in May 2020, and hydrological surveying carried out by Ramboll in September 2020. Hydrogeological assessment of the identified potential GWDTEs is provided with associated mapping.

1.1.2 This TA is supported by the following:

- Volume 3a: Figures
  - Figure 9.3: Superficial Geology;
  - Figure 9.4: Bedrock Geology;
  - Figure 9.5: Carbon and Peatland Soils;
- Figure 9.2.1: Hydrogeology;
- Figure 9.2.2: NVC GWDTE Classification; and
- Figure 9.2.3: Ramboll GWDTE Assessment.

1.1.3 Excavation of soil and bedrock during the construction phase of the Proposed Development may cause localised disruption and interruption to groundwater flow. Interruption of groundwater flow would potentially reduce the supply of groundwater water to GWDTEs thereby causing an alteration/ change in the quality or quantity of and/ or the physical or biological characteristics of the GWDTE. Contamination of groundwater may also cause physical or chemical contamination to the GWDTE.

1.1.4 Following identification of potential GWDTEs from NVC mapping data, the hydrological and hydrogeological desktop study information has been used to help qualitatively determine the potential sensitivity of each potential GWDTE, together with subsequent further Site reconnaissance carried out by Ramboll.

1.1.5 Further details with regard to each GWDTE identified are provided below. The sensitivity of each of the GWDTE receptors has been classed based upon classifications provided within SEPA's guidance LUPS31[1].

1.2 Geology

Superficial Geology

1.2.1 According to the British Geological Survey's (BGS) 'Geology of Britain Viewer' website (1:50,000), the superficial deposits underlying the Site comprise a large area of peat, particularly in the northern and central areas. Devensian Till (Diamicton) and alluvium and river terrace deposits (undifferentiated) underlie the other parts of the Site (Figure 9.3).

Bedrock Geology

1.2.2 The underlying bedrock (Figure 9.4) across the majority of the northern, central, and western parts of the Site underlain by bedrock mapped as the Appin Group, comprising metamorphic graphitic pelite, calcareous pelite, calsilicate rocks and psammite. This is interspersed with metamorphic rocks belonging to the Appin Group and the Argyll Group, both comprising metamorphic quartzite. To the east, the Site is underlain by the Argyll Group, comprising metamorphic psammite, semipelite and pelite, and unnamed igneous rocks comprising neoproterozoic mafic lava and mafic tuff.

Soils and Peat

1.2.3 A review of the SNH (now NatureScot) Carbon and Peatland Map (2016)[2] confirmed that areas of peat and organic material are present across parts of the Site (Figure 9.5). Most of the peat is shown as Class 4 or Class 5 with a very small area of Class 3, however, there are some areas of Class 1 peat shown in the northern and central areas of the Site ('nationally important carbon rich soils, deep peat and priority peatland habitat'). Some smaller areas of Class 2 are also indicated to be present in the central part of the Site ('nationally important carbon rich soils, deep peat and priority peatland habitat').

1.2.4 Findings of detailed peat surveying and assessment of potential impacts on underlying peat resources are provided in Technical Appendices 2.3: Peat Depth Survey.

Groundwater Bodies

1.2.5 According to BGS 1:625,000 hydrogeological mapping (Figure 9.2.1) the Site is underlain by a Low Productivity aquifer in which flow is virtually all through fractures and other discontinuities.

1.3 National Vegetation Classification

1.3.1 A number of potential Highly and Moderately GWDTE were identified after NVC surveys, conducted by Avian Ecology during fieldwork conducted in January 2021. SEPA classification is modified from the UKTAG (2008)[3] list of NVC communities and associated groundwater dependency scores. Where a mosaic of NVC classifications was observed, the community occupying the largest proportion of the mosaic has been considered as representative of the potential for the mosaic to be a GWDTE.

1.3.2 Table 9.2.1 sets out the predominant NVC communities encountered and confirms which are considered to have the potential to be of 'Moderate' or 'High' potential of groundwater dependency; and which have therefore been assessed further within this report. GWDTE ID refers to the results of NVC surveying as shown in Figure 9.2.2.

Table 9.2.1: Ecological Classification of Potential Groundwater Dependent Terrestrial Ecosystems (SEPA GN 31)

GWDTE ID	NVC Code	NVC GWDTE Category
1	MG9/OV25	Moderate
2	M23b	High
3	M23b	High

[1] Land Use Planning System SEPA Guidance Note 31Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems, V3 2017. Available online: LUPS31. [accessed 17/022022]

[2] National Soils Map of Scotland. Available online: https://soils.environment.gov.scot/maps/soil-maps/national-soil-map-of-scotland/. [Last accessed February 2022]

[3] UK Technical Advisory Group on the Water Framework Directive, 2012 Technical Report on GWDTE threshold values.

Table 9.2.1: Ecological Classification of Potential Groundwater Dependent Terrestrial Ecosystems (SEPA GN 31)

GWDTE ID	NVC Code	NVC GWDTE Category
4	M23	High
5	MG9/M23b	Low
6	M23b	High
7	M23b	High
8	M23b/MG9/U5a	Moderate
9	S4	Low
10	MG9	Moderate
11	U4/MG9	Low
12	U4/MG9	Low
13	M23	High
14	MG9	Moderate
15	M23b	High
16	M23b	High
17	U4/M23b	Low
18	MG9	Moderate
19	M23	High
20	M23b	High
21	M23b/H12	High
22	M23/U4	High
23	MG9/U16	Moderate
24	M15b/H12	Moderate
25	M23a	High
26	M23b/MG9/U4b	High

1.3.3 Hydrological and hydrogeological desktop study information, as well as Site-specific conditions informed by surveying carried out by Ramboll in March and July 2021 have been used to qualitatively determine the sensitivity of potentially groundwater dependant habitats.

1.3.4 The assessment includes consideration of:

- the direct hydrological connection of a potential GWDTE to surface water sources;
- underlying geological conditions including the productivity of bedrock and superficial geology, the presence of peat soils and permeability of upgradient geology; and
- topography and the presence of rills or runnels indicative of surface runoff
- the presence of indicative 'flush' patterns of vegetation communities;
- land use; and
- the relative proportion of NVC communities and the potential dominance of non-GWDTE communities within surveyed areas.

1.3.5 Table 9.2.2 summarises the species present in the areas of high GWDTE potential and the likely degree of dependency on the underlying groundwater body, according to Site specific hydrological conditions (Figure 9.2.3). Justification of the assessment of potential groundwater dependency is provided.

Table 9.2.2: Hydrological Review of Potential Groundwater Dependency

GWDTE ID	NVC Communities Present	NVC GWDTE Classification (SEPA GN 31)	Ramboll Groundwater Dependency Assessment	Justification	Shape Area (m^2)
1	MG9 / OV25	Moderate	Not likely to be GW dependent	Former croft area defined by land use, direct connection to Chapel Burn	6,735
2	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Moderate	SW runoff from mire to NW, gentle gradient, topography indicative of surface water flow path	13,318
3	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Moderate	Connection to watercourses and surface water drain from forestry, some potential input from spring	25,927
4	M23: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Moderate	Significant surface water contribution, connection to upslope surface water drains	35,666
5	MG9/ M23b: Holcus lanatus – Deschampsia cespitosa grassland	Low	Not likely to be GW dependent	Topography and boundary not indicative of groundwater emergence (rain fed)	25,293
6	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Moderate	Significant surface water contribution, connection to surface water drains, limited potential for groundwater emergence from the north east	47,796
7	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	In connection to surface water flows from high ground to the north west	4,038
8	M23b/ MG9/ U5a: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	Moderate	Not likely to be GW dependent	Direct connection to watercourse and surface water flow path in upper, western area	57,739
9	S4: *Phragmites australis*	Low	Not likely to be GW dependent	Direct connection to watercourse and area of surface water ponding (distributed flow of Chapel Burn)	5,772
10	MG9: *Holcus lanatus Deschampsia cespitosa* grassland	Moderate	Not likely to be GW dependent	Low lying area with topography suggestive of surface water accumulation, marginal area of grazed fields	18,442

Table 9.2.2: Hydrological Review of Potential Groundwater Dependency

GWDTE ID	NVC Communities Present	NVC GWDTE Classification (SEPA GN 31)	Ramboll Groundwater Dependency Assessment	Justification	Shape Area (m^2)
11	U4/ MG9: *Festuca ovina – Agrostris capillaris – Galium saxatile* grassland	Low	Not likely to be GW dependent	Area not defined by potential source of groundwater emergence, connection to watercourse	58,969
12	U4/ MG9: *Festuca ovina – Agrostris capillaris – Galium saxatile* grassland	Low	Not likely to be GW dependent	Area not defined by potential source of groundwater emergence, connection to watercourse	44,921
13	M23: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Assessment of surface water flow paths and underlying geology (deep peat) indicates area of surface water accumulation	21,239
14	MG9: *Holcus lanatus Deschampsia cespitosa* grassland	Moderate	Not likely to be GW dependent	Area not defined by potential source of groundwater emergence, connection to watercourse	51,340
15	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Moderate	Low lying area in close proximity to watercourse, topography suggestive of surface water accumulation	6,775
16	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Area defined by land use, topography not indicative of an area of groundwater emergence, boundaries drains	82,537
17	U4/ M23b: *Festuca ovina – Agrostris capillaris – Galium saxatile* grassland	High	Not likely to be GW dependent	In connection to surface water flows from north west, drained area of agricultural use	73,168
18	MG9: *Holcus lanatus Deschampsia cespitosa* grassland	Moderate	Not likely to be GW dependent	Direct connection to watercourse	6,340
19	M23: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Direct connection to watercourse, low lying area of SW accumulation	18,287
20	M23b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Moderate	Significant surface water contribution, connection to SW drains, potential groundwater emergence from north east	72,692
21	M23b/ H12: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Direct connection to watercourse, distributed surface water flows in places	46,838
22	M23/ U4: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Topography indicates surface water accumulation, connection to Chapel Burn in north, connection to surface water drains	10,8877
23	MG9/ U16: *Holcus lanatus Deschampsia cespitosa* grassland	Moderate	Not likely to be GW dependent	Connect connection to watercourse	15,910
24	M15b/ H12: *Scirpus cespitosus – Erica tetralix* wet heath	Moderate	Not likely to be GW dependent	Area not defined by potential source of groundwater emergence, area of surface water accumulation	80,259
25	M23a: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Direct connection to Chapel Burn	61,797
26	M23b/ MG9/ U4b: *Juncus effusus/ acutiflorus – Galium palustre* rush-pasture	High	Not likely to be GW dependent	Area of surface water accumulation	20,5206

1.3.6 The locations of potentially groundwater dependent habitats have been considered in the design layout for the Proposed Development and avoided where possible. As a result, the majority of areas that were classified as potentially groundwater dependent are not directly impacted or in hydraulic continuity with proposed Site infrastructure.

1.3.7 Therefore, there are only very limited areas where the Proposed Development could directly impact on potential GWDTE habitats. The access route onto the Site, to the north east of Rinturk Farm passes through an area of M23 (*Juncus effusus'/ acutiflorus – Galium palustre* rush-pasture) (GWDTE ID16), assessed to be of High potential of groundwater dependence. The topography of this area is not indicative of a flush or an area of groundwater emergence and the extent of the drains at the boundary of the area suggest that groundwater levels are managed for agricultural purposes. An area of M23 (*Juncus effusus'/ acutiflorus – Galium palus*tre rush-pasture) (GWDTE ID 3) in direct connection to Green Burn (to the north of Craig Luie) is crossed by an access track to the north east of the Site. Another area of M23/H12 habitat (*Juncus effusus'/ acutiflorus – Galium palustre* rush-pasture, *Calluna vulgaris – Vaccinium myrtillus* heath) (GWDTE ID 21) is present adjacent to the Linn Burn at the track crossing location between Turbine 5 and Turbine 10. The track crossings at these locations shall be perpendicular to the linear areas of habitat such that a limited area would be affected and direct connection to a watercourse in both instances indicates that the degree of groundwater dependency of these areas is low.

1.3.8 In consultation with SEPA (SEPA Document Ref: 2312 – ECU00002177), it was identified that an area of M23 habitat (*Juncus effusus'/ acutiflorus – Galium palustre* rush-pasture) to the east of the proposed Turbine 1 location was potentially suggestive of a flush habitat (GWDTE ID 13). In order to determine

the degree of groundwater dependency, the Site was inspected by Ramboll consultants and further GIS based geo-spatial analysis of the location was carried out in order to assess the likelihood of surface water accumulation in this area. The area is observed to be on the lower, eastern slopes of Garbet Hill at the eastern extent of an area that was previously forestry plantation.

1.3.9 The eastern slopes of Garbet Hill are characterised by peat soils (of Low to Very Low permeability[4]) over which surface water flow is via ephemeral rills and runnels. Peat depths across the area on which a turbine location is proposed are shown to be between 0 and 0.5 m. Peat depths increase downslope towards the area identified as a potential GWDTE. The area of the potential GWDTE is directly underlain by a linear tongue of deep peat recorded to be between 1.5 m and 2 m in depth (Technical Appendix 2.3: Peat Depth Survey Results.).

1.3.10 Surface water flow accumulation across the Site has been assessed through the use of ArcMap Hydrology tools, based on OS 5 m Digital Terrain Modelling (DTM). Analysis of flow conditions across the terrain surface was used to determine likely overland flow paths that receive and convey surface water flows from a cumulative upslope catchment of 1000 m² or greater, in order to provide assessment in line with ground observations of flow paths, aerial imagery and OS mapping of watercourses. Secondly, an index of topographic wetness (TWI) was generated across the study area, which provides an estimation of the relative likelihood of surface water accumulation across a terrain surface based on slope and the upstream contributing area. Across the area assessed (inclusive of a 5 km buffer from the Site boundary), a TWI value of greater than 8.8 indicates that the relative 'wetness' of a given location is within the 90th percentile across the terrain surface assessed.

1.3.11 The north of the potential GWDTE is shown to receive surface water runoff via a flow path that runs in a southerly direction from the ridge between Garbet Hill and Craig Watch (Figure 9.2.3). The central area of potential GWDTE habitat comprises an area of surface water accumulation that receives distributed flows directly from Garbet Hill to the west, within which the likelihood of surface water accumulation is assessed to be within the 90th percentile of values across the study area. The southern extent of the habitat forms a flow path by which surface waters are conveyed to Green Burn.

1.3.12 Therefore, the underlying geology and detailed assessment of surface water runoff across upslope areas in connection to the potential GWDTE area east of Garbet Hill suggests the habitat is supported by the accumulation of surface water flows and the resulting saturation of a band of deep peat soils, rather than the emergence of groundwater from the underlying geology.

1.4 Groundwater Dependency

1.4.1 This section presents a summary of the groundwater dependency assessment of potential GWDTEs identified in Figure 9.2.2 and the residual effects resulting from the mitigation of the potential impacts likely to arise from all phases of the Proposed Development.

1.4.2 UKTAG guidance (2004)[5] recognises that most "water dependent terrestrial ecosystems lie along a continuum between always only groundwater dependent and always only surface water dependent […]. The source of water supply for some wetlands does not appear to be critical, therefore the task of identifying dependence upon groundwater is sometimes complex".

The SNIFFER (2007)[6] guidance states that the dependence of wetlands on groundwater bodies is a result of the hydrological connectivity. The degree of dependency will vary depending upon whether the wetland is underlain by a low productivity or high productivity aquifer and whether there is a hydrological linkage mechanism between groundwater and the surface wetland. Likelihood of dependency is based upon the following:

- High Likelihood: Characterised by intergranular, high productivity drift aquifer and dominantly intergranular, highly productive aquifer;
- Moderate Likelihood: Characterised by intergranular, moderate productivity drift aquifer and fractured, very low productivity aquifer; and
- Low Likelihood: Characterised by intergranular, low productivity drift aquifer and fractured, very low productivity aquifer.

1.4.3 As mentioned above, the Site is underlain by bedrock aquifers with low productivity where the flow is virtually all through fractures and other discontinuities. Where drift deposits are present within the Site, these would also be of low productivity. Therefore, it is assumed that there is low likelihood of groundwater dependency for all the GWDTEs within the Site.

1.4.4 The UKTAG (2004) guidance[5] provides criteria for identification and inclusion of GWDTEs in the risk assessment process, based on the complementary ecological and hydrogeological assessments. These criteria have been used to produce the matrix given in Table 9.2.3, which provides an identification of the sensitive and potentially sensitive GWDTEs that will require a qualitative assessment to ascertain the significance of the risks the Proposed Development poses to them. Further assessment of the potential GWDTEs within the Site was based on the Matrix for Identification of Sensitive GWDTEs (Table 9.2.3) provided below.

Table 9.2.3: Matrix for Identification of Sensitive GWDTEs from Ecological and Hydrogeological Assessments

Ecological Assessment of NVC Communities	Hydrogeological Assessment Groundwater Dependency Level		
	High Likelihood	**Moderate Likelihood**	**Low Likelihood**
Highly groundwater dependent	Sensitive GWDTE	Potentially sensitive GWDTE	Potentially sensitive GWDTE
Moderately groundwater dependent	Potentially sensitive GWDTE	Potentially sensitive GWDTE	Not sensitive
Not groundwater dependent	Potentially sensitive GWDTE	Not sensitive	Not sensitive

1.4.5 The ecological assessment of the recorded NVC communities carried out by Avian Ecology identified the presence of vegetation communities of potentially high or moderate groundwater dependency, according to SEPA classification of NVC communities and associated groundwater dependency.

1.4.6 Due to underlying hydrogeological conditions, topography and land use (as specified in SNIFFER (2007)), all potential GWDTE with which the Site interacts are identified in the Site-specific assessment of NVC communities as not likely to be groundwater dependent. This is because the NVC communities identified are in connectivity with surface water drainage either through:

- direct connectivity with a surface water feature e.g. a watercourse or ephemeral stream;
- located on a hillslope where a number of surface water drains originate, indicating habitat dependency on overland surface water flows;
- are located in peatland habitats likely influenced by ombrotrophic bog and surface water; or

[4] BGS Guide to Permeability Indices 2006. Available online: http://nora.nerc.ac.uk/id/eprint/7457/1/CR06160N.pdf [accessed 07/02/2022]

[5] UKTAG, 2004. Guidance on the Identification and Risk Assessment of GWDTE (Version 5).

[6] SNIFFER (2007) WFD66 – Wetland Hydrogeomorphic Classification for Scotland. Edinburgh: SNIFFER.

- have been identified as being located on an area of surface water accumulation as calculated by connectivity to upslope surface water runoff.

1.4.7 Drift deposits present within the Site are assessed to be of low productivity. The Site is further underlain by bedrock aquifers with low productivity where the flow is virtually all through fractures and other discontinuities. Based on the limited productivity of the underlying geology, it is assumed that there is low likelihood of groundwater dependency for all the GWDTEs within the Site.

1.4.8 Therefore, the habitats initially identified as having a potential to be GWDTE areas are considered not to be groundwater dependent and therefore not sensitive to alterations in groundwater flows.

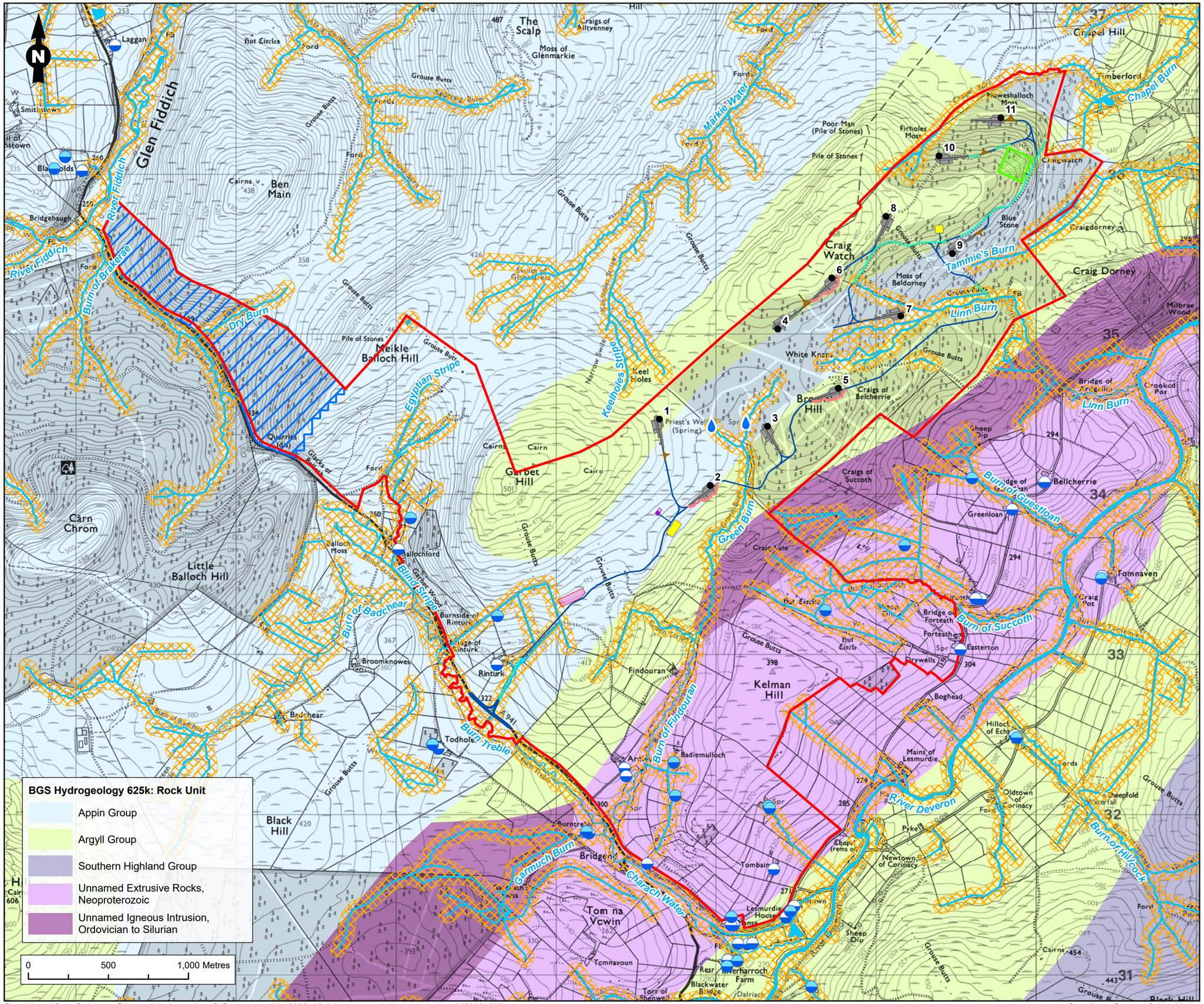
1.5 Mitigation and Further Assessment

1.5.1 As the potential GWDTE areas assessed are not considered likely to be groundwater dependent, specific mitigation with respect to groundwater supplies are not considered to be applicable.

1.5.2 Direct habitat loss of areas identified as potentially groundwater dependent are limited to small areas which are not considered likely to be groundwater dependent, based on Site-specific ecological and hydrogeological assessment. It is anticipated that habitat restoration plans (within the Outline Habitat Management Plan Technical Appendix 7.5), will present the improvement of peat bog habitats covering an area likely to be well in excess of direct habitat loss.

1.5.3 It is noted that the locations assessed are in connection with wider peat bog and mire habitats present across the wider Site. As such, it is considered that the maintenance of quality and quantity in surface water distribution across these areas will be important. Suitable drainage and surface water measures would be used to maintain hydrological connectivity in peatland and wetland habitats and prevent deleterious impacts on surface water distribution, which would be addressed in a CEMP for the Site to be developed by the contractor. Best practice measures would be followed, including those presented in the Outline CEMP (Technical Appendix 2.1) to be provided with the EIAR and cover the following:

- avoidance of direct impact by construction activity in such areas;
- implementation of Sustainable Drainage System (SuDS) measures to maintain quality of water supply;
- maintenance of flow paths/ redistribution of water where diverted; and
- implementation of pollution prevention and control measures.



Legend

- Site Boundary
- Proposed Turbine
- Proposed Turbine Hardstanding
- Proposed Temporary Construction Compound (CC)
- Proposed Substation
- Proposed Met Mast
- Proposed Met Mast Hardstanding
- Proposed Borrow Pit Search Area
- Proposed New Track
- Proposed Existing Track Upgrade
- Proposed Emergency Vehicle Access
- Proposed Turning Head
- Spring
- Private Water Supply: Users
- Private Water Supply: Sources
- Surface Water Features
- Surface Water - 50 m Buffer
- River Fiddich Catchment Area

The entire site is within the river Deveron catchment.

Figure Title

Figure 9.2.1: Hydrogeology

Project Name

Craig Watch Wind Farm
EIA Report

Project Number	Figure No.
1620010178	9.2.1
Date	Prepared By
May 2022	AB
Scale	Issue
1:22,500 @A3	1

Client

Craig Watch Wind Farm Limited

RAMBOLL

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

Legend

- Site Boundary
- Proposed Turbine
- Proposed Turbine Hardstanding
- Proposed Temporary Construction Compound (CC)
- Proposed Substation
- Proposed Met Mast
- Proposed Met Mast Hardstanding
- Proposed Borrow Pit Search Area
- Proposed New Track
- Proposed Existing Track Upgrade
- Proposed Emergency Vehicle Access
- Proposed Turning Head

NVC Classification

- High
- Moderate

0 500 1,000 Metres

Figure Title
Figure 9.2.2: NVC GWDTE Classification

Project Name
Craig Watch Wind Farm
EIA Report

Project Number	Figure No.
1620010178	9.2.2
Date	**Prepared By**
May 2022	AB
Scale	**Issue**
1:22,500 @A3	1

Client
Craig Watch Wind Farm Limited

RAMBOLL

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

Legend

- Site Boundary
- Proposed Turbine
- Proposed Turbine Hardstanding
- Proposed Temporary Construction Compound (CC)
- Proposed Substation
- Proposed Met Mast
- Proposed Met Mast Hardstanding
- Proposed Borrow Pit Search Area
- Proposed New Track
- Proposed Existing Track Upgrade
- Proposed Emergency Vehicle Access
- Proposed Turning Head

Ramboll GWDTE Classification

- High
- Moderate
- Not GWDTE

0 500 1,000 Metres

Figure Title
Figure 9.2.3: Ramboll GWDTE Assessment

Project Name
Craig Watch Wind Farm
EIA Report

Project Number	Figure No.
1620010178	9.2.3
Date	**Prepared By**
May 2022	AB
Scale	**Issue**
1:22,500 @A3	1

Client
Craig Watch Wind Farm Limited

RAMBOLL

Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.