

HABITATS REGULATIONS ASSESSMENT REPORT

WITCHER WELL DUNSOP BRIDGE

RSC-19-01 MARCH 2021



Naturally Wild Consultants Limited 3 Halegrove Court Cygnet Drive Bowesfield Stockton-on-Tees TS18 3DB

Email: hello@naturallywild.co.uk



HABITATS REGULATIONS ASSESSMENT REPORT

WITCHER WELL DUNSOP BRIDGE RIBBLE VALLEY BB7 3AZ

GRID REF SD 65205 52101

REPORT FOR JOHN IBISON

Quality Assurance

Version	Prepared by	Date	Checked by	Date	Approved by	Date	
R1	Michael	16/02/2021	Matthew	16/02/2021	Matthew	16/02/2021	
	Underwood		Buxton		Buxton		
R2	Matthew	03/03/2021	Minor text amendments.				
	Buxton						



REPORT CONTENTS

1	INTR	ODUCTION	4					
2	REQ	QUIREMENTS FOR A HABITATS REGULATIONS ASSESSMENT5						
	2.1	Background	5					
	2.2	Responsibilities	5					
	2.3	Scope of this Assessment	5					
3	DES	SIGNATIONS						
	3.1 Overview							
	3.2	Bowland Fells SPA	6					
	3.2.1	Hen Harrier (Circus cyaneus)	6					
	3.2.2	Merlin (Falco columbarius)	6					
	3.2.3	Lesser Black-Backed Gull (Larus fuscus)	7					
	3.3	Bowland Fells SSSI	7					
	3.3.1	Staple Oak Fell (Unit 43)	7					
	3.3.2	Beatrix Fell (Unit 44)	8					
4	SCR	EENING FOR LIKELY SIGNIFICANT EFFECTS	9					
5	ASS	ESSMENT OF ADVERSE EFFECTS	10					
	5.1	Direct Impacts	10					
	5.2	Indirect Impacts	10					
		Loss of Habitat	10					
		On-site Disturbance	11					
	5.2.3	Increased Footfall	13					
	5.3	Potential Alternatives	14					
	5.4	The Do-Nothing Scenario	14					
	5.5	Cumulative Impacts	14					
6	MITI	GATION MEASURES	16					
7	CON	CLUSIONS	17					
Ω	RFF	ERENCES AND RIRI IOGRAPHY	1Ω					



HABITATS REGULATIONS ASSESSMENT REPORT: WITCHER WELL, DUNSOP BRIDGE

1 INTRODUCTION

Naturally Wild have been instructed to carry out a Habitats Regulations Assessment (HRA) for a site proposed for re-development at Witcher Well near Dunsop Bridge in the Ribble Valley, Lancashire. The proposals are to convert a building, with previous use as a salmon hatchery, into three separate self-contained holiday apartments, with the creation of a car parking area directly to the north of the building and replacement of a corrugated metal roof with a green roof on another small structure on site to the east of the main building. Work will involve vegetation clearance for car park creation, and works to the roofs of both mentioned buildings, as well as considerable internal works to the building proposed for conversion. Two smaller outbuildings on site will be removed and the ground made good and re-seeded. The survey area is comprised of several buildings surrounded by species-rich semi-improved grassland, bracken and a small flush supporting some areas of marshy grassland.

The site lies within relatively close proximity to a site of European importance: Bowland Fells Special Protection Area (SPA), as shown on Figure 1. Due to the close proximity, there is a requirement to consider and address the potential impacts to the site, which is part of the UK National Site Network and protected under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, a.k.a, the 'Habitats Regulations'. This is discussed in more detail in Section 2.

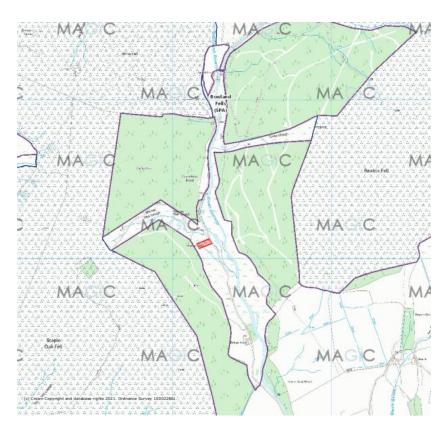


Figure 1. Application site (red) in relation to Bowland Fell SPA to the east and west (purple dotted areas).

(© Crown Copyright and MAGIC database rights 2021. Ordnance Survey 100022861).



2 REQUIREMENTS FOR A HABITATS REGULATIONS ASSESSMENT

2.1 Background

The requirements of the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, known as the Habitats Directive, was adopted in 1992 and is transposed into UK law through the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the 'Habitats Regulations'). The need to consider and address potential impacts on sites of European-level importance, a.k.a. an 'Appropriate Assessment', is set out in Article 6(3) of the Habitats Directive and interpreted into British law by Regulation 63 of the Habitats Regulations.

An Appropriate Assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European protected site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

The Habitats Regulations apply a precautionary approach to relevant designated areas held under the collective term of European or UK National Site Network sites, which includes SPAs, to ensure that a proposed project will have no adverse effect on the integrity of the site.

2.2 Responsibilities

Responsibility for completing an HRA lies with the competent authority, in this case the Ribble Valley Borough Council. In undertaking an assessment, competent authorities must have regard to both direct and indirect effects on the interest features of European sites, as well as any cumulative impacts. Whilst it is the responsibility of the competent authority to determine whether it can be concluded that there are no adverse effects, it is the responsibility of the applicant to submit sufficient information to enable such a decision to be made. The intention of this document is to provide the Council with this information.

2.3 Scope of this Assessment

Based on comments provided from Natural England via the Council, this assessment has been carried out with specific regard to potential impacts to the Bowland Fells SPA. In addition to being a SPA, the Bowland Fells has an overlapping statutory designation as a Site of Special Scientific Interest (SSSI). SSSIs are protected under the Wildlife and Countryside Act 1981 (as amended), which makes it illegal to intentionally or recklessly damage or destroy any of the features of special interest, or disturb wildlife for which the site is notified; therefore, in addition to providing information required to inform the HRA, an assessment of potential impacts to the SSSI habitat is also included within this document.



3 DESIGNATIONS

3.1 Overview

The Bowland Fells SPA and SSSI are overlapping designations located approximately 360 metres (m) to the south-west of the application site at their nearest point. The qualifying features for each designation are described below.

3.2 Bowland Fells SPA

The Bowland Fells Special Protection Area (SPA Ref No. UK9005151) lies entirely within the Forest of Bowland Area of Outstanding Natural Beauty (AONB). The SPA is situated to the east and west of the application site, with the nearest point being 360m to the south-west, as mentioned above. The closest point to the eastern part of the SPA is 562 m to the east. The extensive upland fells support the largest expanse of heather moorland in Lancashire. The dry upland heath is dominated by heather (*Calluna spp.*) and bilberry (*Vaccinium spp.*) is found on steeper slopes. Extensive peat soils are characterised by blanket bog vegetation, such as peat moss (*Sphagnidae spp*), common cotton-grass (*Eriophorum angustifolium*) and heather, with rarer plant species such as bog rosemary (*Andromeda polifolia*). These provide habitats for a diverse breeding bird community, of which make up the site's main qualifying features and additional qualifying features. These are the individual species of wild birds listed on Annex I of the European Wild Birds Directive, which are further discussed below.

3.2.1 Hen Harrier (Circus cyaneus)

Bowland Fells SPA is used by hen harriers during breeding season and was designated in 1993 for holding an average of at least 12 pairs of breeding hen harriers, which was, at the time, 2.4% of the breeding population in Great Britain. Numbers of hen harriers are known to fluctuate, with 117 nests being recorded between 2002 and 2017, representative of 62.6% of all nests in England during that period. Latest counts (2018) indicate three breeding pairs within the SPA, with recovery efforts to restore the species former range and numbers being hampered by illegal persecution. Site-based factors that may have influenced the decline of breeding success include the sensitivity of the species to human disturbance and the loss of some mature heather stands favoured for nesting. Some hen harriers are known to use the area year-round, for roosting and winter foraging. Important roost sites are present outside of the SPA within the Forest of Bowland and nearby Yorkshire Dales, particularly areas of rush-dominated wet pasture and lower-lying moorland and rough grazing.

3.2.2 Merlin (Falco columbarius)

Bowland Fells SPA was designated in 1993 for holding 21 pairs of merlin, which at the time represented 3.2% of the population in Great Britain. Most recent survey work indicates approximately 8 to 12 pairs. The SPA provides merlin with the ground-nesting habitat required in the form of medium to tall stands of heather and good numbers of prey species such as meadow pipit (*Anthus pratensis*). Although reasons for merlin decline within Bowland Fell SPA are unclear, it has been indicated that on a moorland site in Scotland (Heavisides *et al*, 2017), breeding was impacted by loss of mature heather stands due to intensification of land management as well as increased access and infrastructure.



3.2.3 Lesser Black-Backed Gull (Larus fuscus)

Although not an initial qualifying feature of the SPA, the government has undertaken public consultation on the scientific case for the classification of this species as an additional qualifying feature of the SPA. The lesser black-backed gull is known to breed around the coast on sand dunes or shingle islands but are also found inland on upland moors where they nest on the ground, often near long vegetation which provides cover for the chicks. They may overwinter at, or close to, their breeding sites. The Bowland Fells population of lesser black-backed gull is one of the five largest breeding colonies in the UK, and has decreased by 21% since the Seabird 2000 census (18,518 apparently occupied nests (AON) to 14,627 AON in 2018). Reasons for decline of the Bowland Fells population is considered to be due to historic legally permitted culling to protect red grouse and wading birds (JNCC, 2020) and more recent persecution to protect red grouse numbers.

3.3 Bowland Fells SSSI

The Bowland Fells SSSI designation is situated approximately 360m away to the south-west of the application site at its closest point, but also occupies the wider landscape to the north and east. It occupies an area of 16007.83 ha, with the habitats largely comprised of blanket bog and heather moorland. The site supports a range of nationally scarce plants and provides suitable habitat for a diverse upland breeding bird community.

The Bowland Fells SSSI (SSSI Ref No. 1004042) is located to either side of the application site, with 'Unit 43' of the overall SSSI located to the west and 'Unit 44' to the east. Bowland Fells SSSI has main habitat types listed as upland acid grassland, upland bogs and upland dwarf shrub heath. The monitored features of the SSSI include a range of bird species, including hen harrier, lesser black-backed gull, merlin, peregrine (*Falco peregrinus*), short-eared owl (*Asio flammeus*) and assemblages of breeding birds on upland moorland and grassland with water bodies and woodland. Monitored habitats under the designation include upland alkaline fen, upland blanket bog and valley bog, upland mire grassland and rush pastures, upland short sedge acidic fen, upland spring-head rill and flush, subalpine dwarf shrub heath, upland oakwood, upland wet heath and vascular plant assemblages.

3.3.1 Staple Oak Fell (Unit 43)

Located 360m to the south west at its nearest point, Staple Oak Fell is comprised of a broad habitat of upland bogs. The unit was last assessed as 'unfavourable-recovering' in March 2014, with information provided during the assessment describing the site as having areas of active blanket bog located on the top middle section of the unit were observed to have fully recovered from fire damage caused in 2002. Large hummocks of abundant sphagnum moss are present, with other species including hare's-tail cotton-grass (*Eriophorum vaginatum*) and common cotton-grass, with frequent cranberry (*Vaccinium oxycoccos*), cross-leaved heath (*Erica tetralix*), and bilberry, with occasional crowberry (*Empetrum nigrum*), bog rosemary and heather. A small number of small bogs were noted to contain *Sphagnum cuspidatum*.



Areas surrounding the active bog contain drier plant communities of M21 (dry shrub heath on peat) which dominate. The dwarf shrub heath above the south-facing slopes of the unit continue to grow in height, extent and percentage cover since reduction of grazing due to reduced sheep stocking levels. Other areas within the unit are dominated by bracken with flushes dominated by soft rush and areas of leggy heather on eastern-facing slopes.

3.3.2 Beatrix Fell (Unit 44)

Located 560m to the east of the application site, at its closest point, Beatrix Fell was last assessed in October 2010 and considered to be in 'favourable' condition, with a broad habitat type described as upland bogs. The unit is described as having fully recovered due to benefitting from re-seeding works of heather and wavy heather grass seed mix in the late 1990's. Bilberry and heather were observed to be growing well in the upper most parts of the fell with heather percentage within dwarf shrub heath on deep peat over the rest of the fell having increased considerably since 2003 monitoring.

Large patches of leggy heather were present on west-facing slopes above Little Costy Clough and have been described as ideal raptor nesting sites. Areas of blanket bog were present towards the north easternmost part of the fell support cotton-grass, sphagnum moss, cross-leaved heath, cranberry and bog rosemary.

It should be noted that the monitored features of the Bowland Fell SSSI largely pertain to upland areas, with the application site situated at a lowland level (154m above sea level) adjacent to the River Dunsop.



4 SCREENING FOR LIKELY SIGNIFICANT EFFECTS

The first stage of an HRA is a screening assessment, which identifies the likely impacts upon one or more UK National Network Sites, either alone or in combination with other projects, and considers whether these impacts are likely to have significant effects on the designated sites or the features for which they are designated. These include direct and indirect impacts that may impact a protected site; however, in this case, due to the nature of the works and distance between the application site and designated areas, any direct impacts have been screened out of the assessment. This is discussed further in Section 5.

Based on comments received from Natural England via the Council's Planning Officer, an HRA was determined to be necessary due to the close proximity of the application site to the nearby Bowland Fells SPA/SSSI designations. It was considered that, without appropriate mitigation, the application would have an adverse effect on the integrity of the SPA and potentially disturb species for which the SPA is designated.

On this basis, this assessment has been carried out with particular regard to the three species of ground-nesting bird for which the SPA is designated, with potential risks arising from increased footfall in the area resulting from the conversion of the application site into holiday lets.

The ecological aspect of this assessment is supported in part by site surveys undertaken by Naturally Wild (discussed further in section 5).

In addition to considering the potential impacts of the project in isolation, a search of the planning section on the Ribble Valley Borough Council (RVBC) website was also carried out to identify any other projects in the surrounding area that may act in combination with this proposed re-development to have a cumulative impact on the designated sites. Potential alternatives and the 'do-nothing' scenario (i.e. not implementing the proposed development) are also considered.



5 ASSESSMENT OF ADVERSE EFFECTS

5.1 Direct Impacts

Naturally Wild carried out a Preliminary Ecological Appraisal of the application site and surrounding areas on 24th May 2019 to support the planning application. Further to this, update site visits have been carried out on 10th July 2019 and 3rd September 2020 to assess surrounding areas for suitability to support wildlife under an amended planning proposal.

Following these site visits, any direct impacts to the designated sites have been screened out of the assessment. The application site is located 360m from the Bowland Fells SPA. Due to the small-scale nature of the proposals, with the works being restricted to the footprint of the site and largely internal to one of the existing buildings, and the distance of the site from the SPA, which is separated by an area of coniferous plantation woodland, there will be no direct impact on the designated area as a result of the works and, as such, no adverse effects. This is also considered to be applicable to the SSSI.

5.2 Indirect Impacts

5.2.1 Loss of Habitat

In addition to harm caused to the areas designated as an SPA, this assessment is also required to take into consideration:

- Effects on the qualifying habitats/species of an SPA outside the boundary of the designated site, if these are relevant to the site meeting its conservation objectives; and
- Effects on non-qualifying habitats and/or species on which the qualifying habitats and/or species depend and which could result in effects on the qualifying features.

As mentioned, the proposed works will be contained to the footprint of the application site boundary, with the major work being contained within the salmon hatchery building, B1 (Figure 2). One area of semi-improved grassland immediately to the north of building – extensively used as an access track – will be converted to a gravel parking area (which will be seeded), suitable for six cars with a width of approximately 18m. Additionally, buildings B3 and B4 will be demolished as they are disused and no longer serving a purpose, and B2 will be retained and fitted with a green roof.



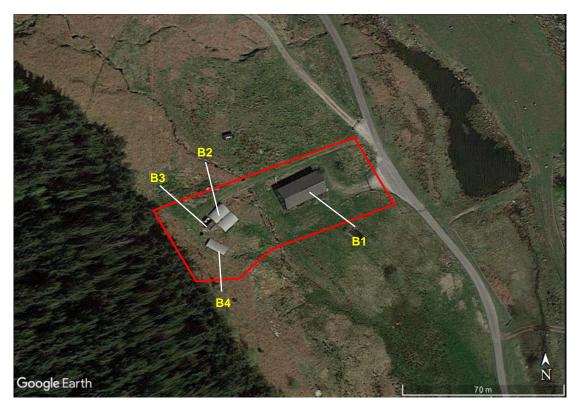


Figure 2. Application site boundary and buildings on site. (Image taken from Google Earth Pro: ©2021 Map Data Google)

Notwithstanding the proposals for each of the buildings, none of the buildings offer any suitable habitat for the designated bird species to nest or forage. Furthermore, the vegetated habitats on site also offer no suitable nesting habitat for the species in question (discussed further below), and the areas that are to be affected by the proposed works are so limited in extent that any impacts to potential foraging habitat or the prey items within them are expected to be negligible. On this basis, it is considered that there will be no adverse effects to the integrity of the designated areas resulting from indirect loss of habitat.

5.2.2 On-site Disturbance

In this instance, it was considered necessary to assess the suitability of the surrounding areas adjacent to the application site to support ground-nesting birds and check for any evidence of the three designated species of the SPA. During the three sites visits which documented on-site and surrounding habitats, no suitable habitat for hen harrier or merlin nesting was noted to be present on or adjacent to the site, with an approximate 325m strip of coniferous plantation woodland buffering the application site to the SPA's closest point to the south west (Figure 3). Regarding both merlin and hen harrier, the application site is not considered to contain suitable nesting habitat, due to an absence of mature heather stands, with the only loss of vegetation resulting from the proposed works being that of a relatively small patch of semi-improved grassland.



The application site is also situated directly off an access road, which was noted to be used by vehicles and a notable number of walkers entering the area. The location of the application site off an access road, with electric and water already present, would negate the potential for any disturbance caused by any infrastructure needs, as suggested as a potential reason for merlin breeding decline. As both designated species are noted to be sensitive to human disturbance, it is considered unlikely that they would be nesting/active in or around the area of the application site, where regular human disturbance by walkers is already established. The closest favoured nesting habitat of the designated species are areas of nearby upland heathland which are present at their closest point 838m to the north and 1.1km to the south-west (Figure 4). Little Costy Clough, situated within Unit 44 of the SSSI, was described as having an area of leggy heather and ideal as a raptor nesting site. Little Costy Clough is situated approximately 2.1km north east of the application site.

As the lesser black-backed gulls are known to use upland areas or moor, with upland areas being classified as greater than 200m above sea level, and the application site being situated at ~150 m above sea-level, the proposed works will not take place on upland habitat and are therefore not expected to impact the lesser blacked-backed gull populations that are using the SPA.



Figure 3. Application site (red) and buffering coniferous woodland (dark green) to the east, north and south

(Image taken from Google Earth Pro: ©2021 Map Data Google)





Figure 4. Application site (red) in relation to nearby upland heathland (lime green). (© Crown Copyright and MAGIC database rights 2021. Ordnance Survey 100022861).

On the basis of the above, potential disturbance or harm to qualifying species outside of the designated area as a result of on-site activities are expected to be negligible.

5.2.3 Increased Footfall

One potential factor which could have a negative impact to the SPA and designated features is the increased footfall in the area as a result of the additional holiday let accommodation that the proposals will provide. Each of the three lets will contain two bedrooms with either a double or twin beds, resulting in a total maximum capacity of 12 guests. It is generally accepted that guests would often partake in hiking/walking activities in the local area, and potentially enter the SPA/SSSI whilst doing so.

The proposals are expected to result in only a small increase in walkers present in the area, with a maximum of 12 guests present at any one time, and a well-established Public Right of Way (PRoW) is already present close to the site, providing a defined route for walkers, which should aid in minimising any encroachment into any habitats that don't form part of the walking route and, in turn, limit disturbance to SPA habitat. Notwithstanding this, complete avoidance of SPA habitats cannot be guaranteed, and it is understood that human disturbance is a factor in the decline of hen harrier and merlin; therefore, appropriate further mitigation will be incorporated into the operational phase of the development to ensure that potential impacts are avoided.



5.3 Potential Alternatives

Potential alternatives are not considered feasible due to the plans being for the re-development of an already present building, with no other land available within the applicant's ownership that would serve the same purpose. Aspects of the proposals include plans to improve the area of the application site, including installation of a green roof on B2, removal of B3 and B4 and the ground being made good and re-seeded, along with the control of bracken within the site boundary where possible to maintain plant species diversity. The original proposals for the site included installation of glamping pods to the northeast; however, this alternate proposal is considered to have a lower impact, with reduced maximum guest capacity, and restricting works to an already present building, resulting in no gain of developed land, which would have been a result of previous plans.

Given the finalised site plans, these are considered to offer the lowest impact to the surrounding areas.

5.4 The Do-Nothing Scenario

The do-nothing scenario would result in the salmon hatchery remaining in its current use, which is currently for storage purposes. The two outbuildings would remain on site, and the green roof would not be installed on B2. While the do-nothing scenario would significantly reduce the likelihood of impacts to the SPA, not carrying out the proposed works would result in the associated environmental and ecological benefits of the proposals not being realised, with appropriate management of on-site and surrounding habitats potentially not being undertaken, which may result in an overall decrease in ecological value in the long term. It would also result in a lost opportunity to inform visitors to the area of the conservation objectives of the SPA and how to avoid disturbance to the designated species of ground nesting birds (see Section 6).

Based on the benefits of implementing the proposed works, along with the ability to implement appropriate mitigation measures, it is considered that carrying out the re-development would be preferable to doing nothing.

5.5 Cumulative Impacts

To determine any cumulative impacts the proposals may have, in line with similar proposals in the area, a search was conducted to determine any adverse effects that may arise. A postal code search was conducted within a 5km radius of the application site, with a total of 21 postcodes being located within the 5km search. These postcodes were then checked on the RVBC planning portal, with results being individually checked to determine if any similar proposals are currently under planning consideration, or any that have been granted within the past five years, that might also affect the SPA.

It should be noted that no specific scope has been defined by Natural England or RVBC in terms of the areal extent or time period over which the cumulative assessment should be undertaken. In the absence of specific guidance, the five-year time period and 5km search area have been defined based on guidance provided by Natural England in relation to European Protected Species mitigation licence applications, and on similar buffer zones around protected sites defined by other Local Planning Authorities. This was considered to provide an appropriate scope to adequately determine any cumulative impacts.



The search indicated that the majority of planning applications in the area around the application site relate to agricultural workings, works to listed buildings, tree works, installation of solar panels and private extensions, none of which would be considered to have adverse effects on the integrity of the SPA, either alone or in combination. Of the 5km search, only one similar proposal was found. Located in Newton, planning was granted (ref: 3/2020/0905) to convert an outbuilding into a two-bed holiday let in 2020. The grid reference for the site is SD 6968 5034 and is located approximately 4.8km south-east of the application site and 3.4km south east of the SPA/SSSI.

Due to the distance between the holiday let in Newton and the application site, the small occupancy that the Newton holiday let will provide, and the lack of any other related planning applications or previous granted planning permissions within the last five years, it is considered that there will be no adverse cumulative effects from the proposed works at Witcher Well.



6 MITIGATION MEASURES

Based on the assessment undertaken, there are not expected to be any direct impacts as a result of the proposed works, with any potential impacts to the designating features of the SPA/SSSI being restricted to increased footfall from guests using the holiday lets. In view of the findings, the following mitigation measures are considered to be required to ensure no adverse effects to the Bowland Fells SPA/SSSI.

- An information pack will be provided to all guests to explain the nature of the SPA, the reasons for its designation and species for which it is designated. A location map will be provided within the pack, highlighting the proximity from the site along with information on breeding habitat of hen harrier, merlin and lesser black-backed gull and how to avoid disturbance. Good practice guidelines will be set out for guests to follow during any visits to the SPA such as sticking to designated and well-worn footpaths and PRoW, keeping dogs on leashes, and avoiding habitats that offer nesting suitability to the designated species. Provision of this information could be secured via a planning condition.
- As many guests may be keen birdwatchers, a guest book could be kept within each holiday let to allow recordings of sightings and could potentially be used to provide data for species within the area, to be provided to the local environmental records centre to aid conservation efforts and management of the SPA/SSSI.

Further ecological mitigation, compensation and enhancement measures to be incorporated into the redevelopment have been outlined in Naturally Wild's Ecological Impact Assessment report, provided separately.



7 CONCLUSIONS

This HRA relates to proposals to convert an old fish hatchery building into three separate holiday lets, with the installation of a green roof on another building within the site boundary, and the removal of two disused outhouse-style structures. A car parking space for up to six cars will be formed with gravel (which will also be seeded), largely situated on an already present entrance track into the site.

The site lies within relatively close proximity to the Bowland Fells SPA/SSSI. Consultation with Natural England has determined that there is a potential for disturbance to the qualifying features of the SPA. As such, there was considered to be a requirement to consider and address the potential impacts on these designations.

No direct adverse effects are expected to be incurred, and any potential indirect effects during the operational phase of the development are expected to be largely avoided due to the relatively small maximum occupancy available and the presence of an existing adjacent popular walking route with well-worn tracks and PRoW. Any impacts from the proposals in a cumulative context are considered negligible, due to the distance to the nearest related planning application located 4.8km from the application site, which is also a small scale (two bedroom) holiday let, along with the overall lack of any planned projects that could have an adverse effect on the SPA.

Provision of information packs to guests will help to inform them of the SPA-designated features and how to avoid causing disturbance during their visit. The opportunity will be provided for guests to record wildlife sightings, which could be provided to local records centre to increase data within the area and allow long term monitoring.

Providing that the mitigation measures are implemented, it is considered that there will be no adverse effects on the integrity of the SPA/SSI resulting from the proposed re-development.



8 REFERENCES AND BIBLIOGRAPHY

British Standards Institution (2013) *BS 42020:2013. Biodiversity – Code of practice for planning and development.* British Standards Institution, London.

Chartered Institute of Ecology and Environmental Management (CIEEM) (2017a) *Guidelines for Preliminary Ecological Appraisal (2nd ed.)*. CIEEM, Winchester.

CIEEM (2017b) Guidelines for Ecological Report Writing (2nd ed.). CIEEM, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine, version 1.1, CIEEM, Winchester.

European Economic Community. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Heavisides A., Barker A., & Poxton I. 2017. Population and breeding biology of Merlin in the Lammermuir Hills. British Birds, 110: 138–154

Joint Nature Conservation Committee (JNCC) (2020) Lesser black-backed gull (Larus fuscus) https://jncc.gov.uk/our-work/lesser-black-backed-gull-larus-fuscus/#annual-abundance-and-productivity-by-geographical-area-england

Ministry of Housing, Communities and Local Government (2019) *National Policy Planning Framework*. Crown Copyright 2019

https://www.gov.uk/government/collections/revised-national-planning-policy-framework

Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2021]. Ordnance Survey 100022861. Available at: http://www.magic.gov.uk/

Natural England (2014) European Site Conservation Objectives for Bowland Fells SPA (UK9005151). Available at: http://publications.naturalengland.org.uk/publication/5922368258048000

Natural England (2019) European Site Conservation Objectives: supplementary advice on conserving and restoring site features 2019. Available at: http://publications.naturalengland.org.uk/file/5676203038212096

Rose, F. and O'Reilly, C. (2006) The Wild Flower Key, Revised Edition. Penguin Books, London.

Wildlife and Countryside Act 1981 (as amended).