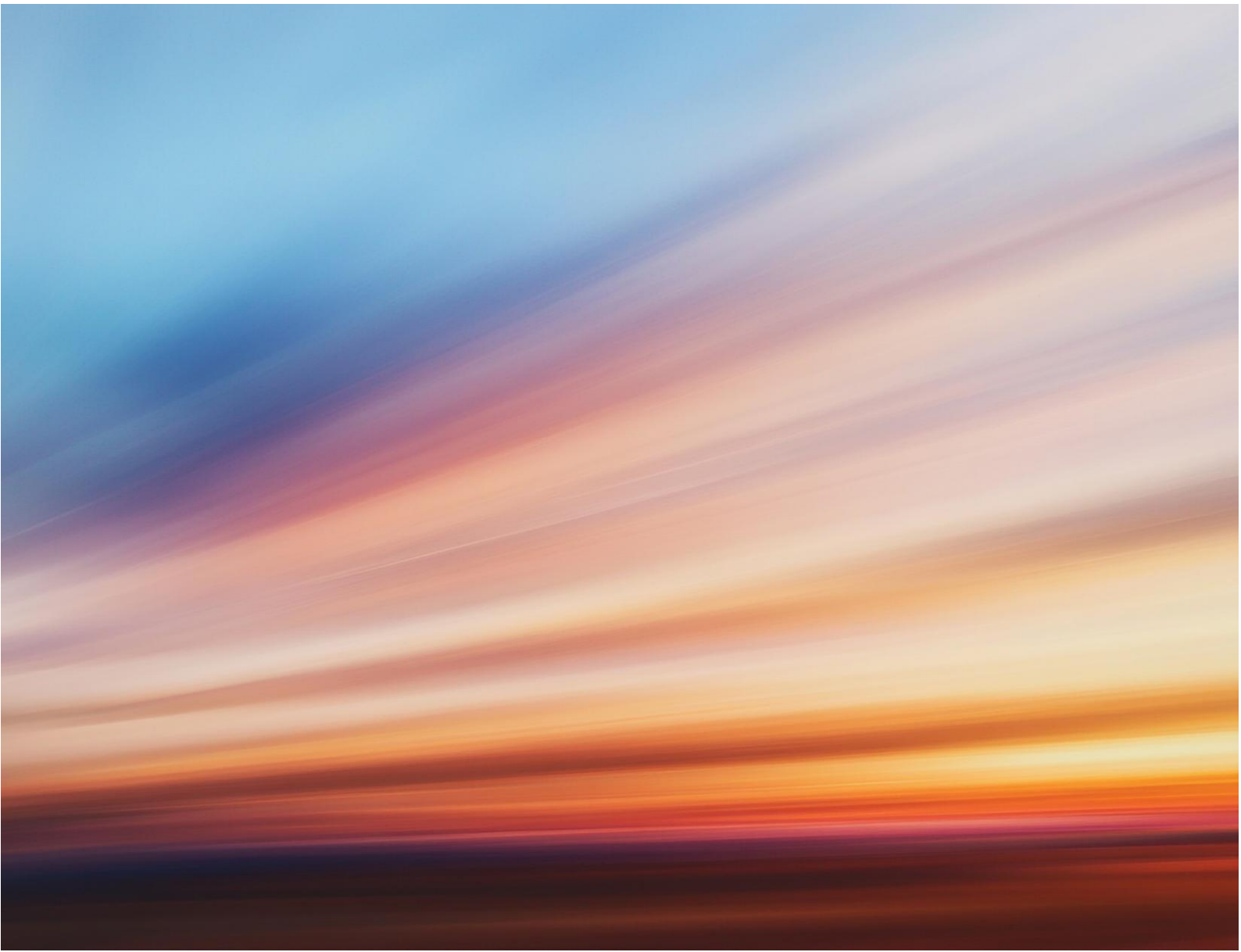
Mylen Leah Solar Farm

Preliminary Environmental Information Report (PEIR)

Volume 3

Appendix 7.6: Ecological Constraints Report

April 2026



Contents

1 Introduction

1.1 Purpose of this report

1.1.1 This report forms Appendix 7.6 to **Chapter 7:Biodiversity** in **Volume 1** of the PEIR. This report provides additional information relating to the baseline biodiversity condition of the land within the draft Order limits, providing detailed assessments of the findings, based on background data searches, and surveys undertaken to date. The site location is shown on **Figure 7.2: Biodiversity Zone of Influences** in **Volume 2.**

1.1.2 This report covers the following species, and species groups:

- Invertebrates;
- Fish;
- Reptiles;
- Water vole and otter;
- Other species of principal importance; and,
- Invasive non-native species.

1.1.3 Baseline information for other species/groups of species such as birds, bats, great crested newts and badgers are not included in this report.

1.1.4 RSK Biocensus (RSK) was commissioned to undertake an ecological constraints assessment for within the solar PV development area associated with Mylen Leah Solar Farm. The development comprises the construction, operation and decommissioning of a solar photovoltaic (PV) generating station and grid connection infrastructure to allow export to the National Grid Thornton Substation. The approximate grid reference of the centre of the Site is SE? 475391, 441654 (British National Grid). The surveys focussed on the solar PV development area and are referred to as the 'Site' within this report.

1.2 Landscape context

1.2.1 The solar PV development area comprises predominately arable and pasture farmland south of Melbourne, Yorkshire, within the administrative area of East Riding of Yorkshire Council. The immediate surrounding area comprises arable and pasture fields, divided by a network of tree lines, hedgerows and watercourses. There are also several small pockets of woodland within the draft Order Limits and within the immediate surrounding area.

1.2.2 In the wider surrounding area, the habitats are similar in composition. The landscape is predominantly agricultural, interspersed with small villages which are connected by unlit country lanes. There are pockets of higher quality habitat, particularly within the Lower Derwent Valley, which is located to the west of the Site. The Lower Derwent Valley is a network of floodplain meadows, fens, swamps, woodlands, and other freshwater habitats.

2. Methods

2.1 Invertebrates

2.1.1 Records of invertebrates within 2km of the draft Order Limits were provided by North and East Yorkshire Ecological Data Centre. Records of up to 15 years old were considered.

2.1.2 Consideration was given to the presence of features and habitats that might be suitable for the notable species identified in the background data search. The desk study also included a review of statutory and non-statutory designated sites within the study areas, to determine whether there are any sites for which invertebrates are a qualifying feature/reason for designation, and whether the habitats within the draft Order Limits are suitable to support these species.

2.2 Fish

2.2.1 A desk study for fish considered the habitats within the draft Order Limits and the associated water catchment within the study area. Records of fish within 2km of the draft Order Limits were also provided by North and East Yorkshire Ecological Records Centre.

2.2.2 Data from within the past 20 years up to 2025 (from the Environment Agency monitoring data (Environment Agency, 2025)), from the relevant locations closest to the draft Order Limits within the Foulness catchment and the Lower Derwent to Yorkshire catchment, was used to determine the potential fish species present in the local area.[1]

2.2.3 The desk study also included a review of statutory and non-statutory designated sites within the study area. The review was undertaken to determine whether there are any sites for which fish are a qualifying feature or reason for designation, which are hydrologically connected to the draft Order Limits and to determine whether the habitats within the draft Order Limits are suitable to support these species.

2.3 Reptiles

2.3.1 A desk study of the draft Order Limits assessed the recorded and likely habitat within the draft Order Limits for reptile suitability. The assessment considered the reptile records provided by the North and East Yorkshire Ecological Data centre within 2km of the draft Order Limits, the habitat within the Land Area using the UK Habitat classification survey detailed in **Appendix 7.1: Habitat Survey Report (Solar PV Development Area)** in **Volume 3** and a review of online aerial mapping.

2.3.2 The habitat was assessed for suitability for the four most widespread reptile species, grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*) and adder (*Vipera berus*). Particular attention was given to those features that provide suitable basking areas (e.g. south-facing

slopes), hibernation sites (e.g. banks, walls, piles of rotting vegetation) and opportunities for foraging (e.g. rough grassland and scrub).

2.4 Water vole and Otter

2.4.1 A desk study assessed the recorded and likely habitat within the draft Order Limits for their suitability for use by water vole (*Arvicola amphibius*) and otter *(Lutra lutra*). The assessment considered water vole records provided by the North and East Yorkshire Ecological Records Centre within 2km of the draft Order Limits, the habitat within the Land Area using the UK habitat classification survey information detailed in **Appendix 7.1: Habitat Survey Report (Solar PV Development Area)** in **Volume 3** and aerial habitat mapping available online.

2.5 Other species of principal importance

2.5.1 Incidental sightings and habitat suitable for species of principal importance were recorded during ecological surveys of the solar PV development area completed to date. The solar PV development area has been assessed as suitable for a number of other species of principal importance such as European hedgehog (*Erinaceus europaeus*) and brown hare (*Lepus europaeus*) which were recorded throughout the solar PV development area.

2.5.2 A desk study of the draft Order Limits for other species of principal importance included the records provided by the North and East Yorkshire Ecological Records centre within 2km of the draft Order Limits, incidental recordings provided within **Appendices 7.1** to **7.5** in **Volume 3** and online aerial habitat mapping.

2.6 Invasive non-native species

2.6.1 The UK habitat classification survey detailed in **Appendix 7.1: Habitat Survey Report (Solar PV Development Area)** in **Volume 3** identified invasive non-native plants species within the Solar PV Development Area.

2.6.2 A desk study of the draft Order Limits assessed the risk of invasive non-native fauna and flora species within the draft Order Limits. The assessment considered the records of invasive non-native species provided by the North and East Yorkshire Ecological Records Centre within 2km of the draft Order Limits, information detailed in **Appendix 7.1: Habitat Survey Report (Solar PV Development Area)** in **Volume 3** and online aerial habitat mapping.

2.7 Survey limitations

2.7.1 The assessment is a desk study based on data as described above. The findings are reported taking into account the available data. The assessment has made reasonable assumptions regarding the suitability of habitats based on the available information.

2.8 Validity of data

2.8.1 In accordance with The Chartered Institute of Ecology and Environmental Management guidelines[2], the findings of this report are considered valid for a period of 18 months from the date of the survey period, provided no significant land-use changes occur. Beyond 18 months, a site re-assessment will be required to confirm the continued validity of the baseline. After three years, the report should be considered lapsed, and a full suite of updated surveys will likely be necessary.

3. Baseline assessment

3.1 Invertebrates

3.1.1 The background data search returned 69 invertebrate species records within 2km of the site, notably aquatic invertebrates such as dragonflies (*Odonata*). White-clawed crayfish (*Austropotamobius pallipes*) were also present in the records (last recorded in 1997). These records are presented within **Appendix A**.

3.1.2 Pocklington Canal Site of Special Scientific Interest (SSSI) and Melbourne and Thornton Ings SSSI are national statutory designated sites within the draft Order Limits and include important invertebrate assemblages as designated features. International statutory designated site Lower Derwent Valley Ramsar site is located directly adjacent (0m) from the draft Order Limits and Ramsar criterion two includes an assemblage of wetland invertebrates including 16 species of dragonfly and damselfly, 15 British Red Data Book wetland invertebrates and a leafhopper (*Cicadula ornata*). Other nearby national statutory designated sites that include invertebrate assemblages as citations are Lower Derwent Valley National Nature Reserve (NNR) (295m north west), Derwent Ings SSSI (1.12km west) and River Derwent SSSI (1.45km west).

3.1.3 The Site was considered likely to support an assemblage of common invertebrate species, typical of the improved grassland, arable, hedgerow and damp grassland habitats present on the Site, but there is potential for invertebrate species and/or communities of conservation importance to be present, particularly in association with still or slow-moving water, marshy grassland, and adjacent to areas of woodland. Where the underground grid connection corridor crosses the Pocklington Canal there is potential for species of conservation concern to be present.

3.1.4 At total of 38 invertebrates of conservation interest were recorded within 2km of the draft Order Limits since 2010. These comprised four species of mollusc, and 34 species of insects, made up of 10 true flies (*Diptera*), three butterflies *(Lepidoptera*), 17 beetles (*Coleoptera*), three species of wasp (*Hymenoptera*, and one caddisfly (*Trichoptera*).

Molluscs

3.1.5 Two nationally scarce molluscs, the pond mud snail (*Omphiscola glabra*) and Lister's river snail (*Viviparus contectus*) were identified from within 2km of the draft Order Limits. Lister's river snail is a species of slow-moving waters and is unlikely to be found within the draft Order Limits apart from within the underground grid connection corridor where it crosses the Pocklington Canal. The pond mud snail has potential to occur in small ponds, wet ditches, and at the margins of streams and rivers and therefore has the potential to be recorded from within the draft Order Limits. This species is also a Section 41 priority species.

3.1.6 Snails within the *Stagnicola palustris/fuscus/corvus* species aggregate (pond snails) were recorded within 2km of the draft Order Limits. Specific identification was not made and the species within this aggregate are regarded as data deficient with regard to conservation status. Pond snails have potential to occur within the draft Order Limits in ponds, wet ditches and slow-moving streams, as well as at the margins of rivers.

3.1.7 Swan mussel *(Anodonta cygnaea)* is another species of still or slow moving water recorded from within 2km of the draft Order Limits. It is classified as Near Threatened and is of local conservation concern. It has potential to occur within the draft Order Limits.

Insects

3.1.8 The fly *Gymnomus caesius* was recorded as new to Britain in 2019 and has been found within 2km of the draft Order Limits. It is usually associated with mature woodland and so has limited potential to be present within the draft Order limits.

3.1.9 *Paraphotistus nigricornis* (a click beetle) is listed on the Great Britain (GB) Red List as Vulnerable (Red Data Book (RDB)3) (JNCC 2025).[3] It is a species of wet marshy areas, particularly floodplains. It's larvae develop in wet floodplain soils. The species can also be found in association with wet woodlands. There is potential for this species to occur within the draft Order Limits in floodplain areas prone to seasonal flooding.

3.1.10 *Bactromyia aurulenta* (a Tachinid fly) is listed as RDB3. It is parasitic upon terrestrial woodlice, and may occur wherever its host species are present. It is typically recorded from semi-improved grassland adjacent to damp woodlands, and in damp meadows. There is therefore the potential for this species to be present within the draft Order Limits.

3.1.11 Small heath butterfly (*Coenonympha pamphilus*) is a Section 41 Priority species and is listed on the GB Red List as Vulnerable. It has been recorded within 2km of the draft Order Limits, and can occur wherever fine grasses are present, including grasslands, road verges and woodland rides. There is potential for this species to occur within the draft Order Limits wherever these habitats are present.

3.1.12 An assemblage of notable insects associated with still or slow-moving water has been recorded from within 2km of the draft Order Limits. This includes

the beetles *Agabus uliginosus* (Nationally Scarce (NS)), *Helophorus nanus* (NS), *Helophorus strigifrons* (NS), *Gryptus equiseti* (Nationally Notable b (Nb)), *Gymnetron veronicae* (Nb) and *Hydroporus neglectus* (NS), the flies *Angioneura acerba* (Red Data Book (RDB Data Deficient (DD)), *Ochthera manicata* (NS), *Cheilotrichia imbuta* (Nb), *Lispocephala falculata* (NS), *Sarcophaga sinutata* (NS), and the caddisfly *Limnephilus griseus* (NS). Some or all of this assemblage has potential to occur within the draft Order Limits in areas of wet grassland, and in or adjacent to ponds and wet ditches. They way also be present within the area of the underground grid connection corridor, at the edges of Pocklington Canal. .

3.1.13 A further 17 species of insects of conservation interest were recorded within 2km of the draft Order Limits. These include the weevil *Dorytomus hirtipennis* and the leaf beetle *Agelastica alni*, both Nationally Rare. Specific habitat data for these species is lacking, or they are indicated as generalists.

Designated Sites

3.1.14 The Lower Derwent Valley Ramsar site is also the only UK site for the leafhopper *Cicadula ornata*, and 15 other species of invertebrates of national importance are also listed as occurring within its boundaries: *Panagaeus cruxmajor, Dytiscus dimidiatus, Saprinus virescens, Hydraena palustris, Atheta terminalis, Parphotistus nigricornis, Hypera diversipunctata, Rhamphomyia phyoprocta, Hilara brevittata, H. merula, Dolichopus cilifemoratus, Herrostomus angustifrons, Antichaeta analis, A. obliviosa,* and *Dichetophora finlandica.* Additionally, an assemblage of 31 species of dragonflies and damselflies is listed for the site. Many of these species are highly mobile and there is strong potential for them to disperse into the draft Order Limits when foraging or seeking new habitats.

3.1.15 Lower Derwent Valley NNR is also designated for an assemblage of rare invertebrates and includes wet woodland habitats. This site is less than 300m from the draft Order Limits, so there is potential for invertebrates to be able to disperse into the draft Order Limits.

3.1.16 Pocklington Canal SSSI and Melbourne and Thornton Ings fall within the draft Order Limits. Both sites are designated for 13 species of dragonflies and damselflies, including red-eyed damselfly *Erythromma najas*, and Pocklington Canal Site of SSSI also has rare reed beetles (*Donaciinae*) recorded as present.

3.1.17 Derwent Ings SSSI includes records of three nationally rare species, a snail killing fly *Sciomyza dryomyzina*, a fresh water snail *Lymnaea glabra* and a Ptilid beetle Acrotrichis subcognata. These species may be limited in their ability to easily disperse to within the draft Order Limits, but 16 species of dragonflies and damselflies are also recorded as present, some of which are strong fliers and potentially able to disperse into the draft Order Limits.

3.1.18 Derwent River SSSI includes records of 11 species of dragonflies and damselflies, but is listed as important for three species of rare mayflies *Baetis*

buceratus, *Heptagenia fusogrisea* and *Brachycerus harisella* and one stonefly *Taeniopteryx nebulosa*.

3.1.19 Since there are direct hydrological links such as Pocklington Canal between the draft Order Limits and the complex of designated sites within the Derwent River catchment, there is potential for the notable species listed above to be found within the draft Order Limits.

3.2 Fish

3.2.1 The background data search returned records of European eel (*Anguilla* anguilla), spined loach (*Cobitis taenia*) and brown trout (*Salmo trutta*) from within 2km of the draft Order Limits. There are also records of fish within the protected sites which are hydrologically connected to the site.

3.2.2 Bullhead (*Cottus gobio*), river lamprey (*Lampetra fluviatilis*) and sea lamprey (*Petromyzon marinus*) are qualifying features for the River Derwent SAC, which is located 1.45km west of, and hydrologically connected to the draft Order Limits. bleak (*Alburnus alburnus*), ruffe (*Gymnocephalus cernuus*) and burbot (*Lota lot*a) are listed within the citation for the River Derwent SSSI, which underpins the River Derwent SAC. Burbot is currently extinct in the UK (IUCN 2022).[4]

3.2.3 Part of the site falls within the catchment for the River Derwent (generally Land Parcels east of the road named “Main road”, Laytham, and the majority of the underground grid connection corridor), and the remainder of the site falls within the Foulness catchment. The watercourses and catchments are shown in **Figure 1**, appended to this report.

3.2.4 The Land Parcels fall within the furthest upstream tributaries of the River Derwent catchment, and the Foulness catchments, providing no upstream connectivity to other habitats.

3.2.5 The underground grid connection corridor passes through the River Derwent catchment, crosses the Pocklington Beck, which provides limited connectivity into the upstream sections of the lower Derwent catchment.

3.2.6 Environment Agency monitoring data (Environment Agency 2025) from the two closest locations, within the Foulness River (within 1.6km to 1.7km south east of the draft Order Limits), has recorded the fish species in **Table 3.1**. Records from the past 20 years were reviewed.

3.2.7 The locations the records were reviewed from are Lincoln Flats gauging weir, River Foulness FOULNES1 (7552) (grid ref. SE77990 37235) and Major Bridge, River Foulness FOULNES2 (7553 & 48663) (grid ref. SE78016 38093).

Table 3.1: Fish Records within Foulness River

Fish species	Most recent date recorded	Sample location reference
10-spined stickleback (*Pungitius pungitius*)	2025	Major Bridge, river Foulness (48663)
3-spined stickleback (*Gasterosteus aculeatus*)	2025	Lincoln Flats gauging weir, River FoulnessFOULNES1 (7552)
Bullhead (*Cottus gobio*)	2016	Lincoln Flats gauging weir, River FoulnessFOULNES1 (7552)
Chub (*Squalius cephalus*)	2025	Major Bridge, river Foulness (48663)
Common bream (*Abramis brama*)	2006	Lincoln Flats gauging weir, River FoulnessFOULNES1 (7552)
Dace (*Leuciscus leuciscus*)	2025	Major Bridge, river Foulness (48663)
European eels >elvers (*Anguilla anguilla*)	2005	Major Bridge, River Foulness FOULNES2 (7553)
Gudgeon (*Gobio gobio*)	2025	Major Bridge, river Foulness (48663)
Minnow (*Phoxinus phoxinus*)	2023	Major Bridge, river Foulness (48663)
Perch (*Perca fluviatilis*)	2023	Major Bridge, river Foulness (48663)
Pike (*Esox lucius*)	2023	Major Bridge, river Foulness (48663)
Roach (*Rutilus rutilus*)	2025	Major Bridge, river Foulness (48663)
Roach x rudd hybrid (*Rutilus rutilus x Scardinius erythrophthalmus*)	2025	Major Bridge, river Foulness (48663)
Rudd (*Scardinius erythrophthalmus*)	2025	Major Bridge, river Foulness (48663)
Silver bream (*Abramis bjoerkna*)	2007	Major Bridge, River Foulness FOULNES2 (7553)
Spined loach (*Cobitis taenia*)	2025	Major Bridge, river Foulness (48663)
Stone loach (*Barbatula barbatula*)	2025	Major Bridge, river Foulness (48663)
Tench (*Tinca tinca*)	2013	Major Bridge, river Foulness (48663)

3.2.8 Environment Agency (Environment Agency 2025) monitoring data from three closest locations, within the Lower Derwent catchment, within the past 20 years, has recorded the fish species in **Table 3.2**.

3.2.9 Records have been reviewed from the Bielby Beck System: The beck, Thornton Bridge (SE7610044400), 235m west of the draft Order Limits, and Burnby Beck, Hayton (SE8180045700), 1.3km west of the draft Order Limits. and Pocklington Beck, Canal Head (SE8007347398), 2.8km north-east of the draft Order Limits.

Table 3.2: Fish Species Within Tributaries to the Lower Derwent Catchment

Fish species	Most recent date recorded	Sample location reference
10-spined stickleback (*Pungitius pungitius*)	2012	The Beck, Thornton Bridge DERCORS14 (3843)
3-spined stickleback (*Gasterosteus aculeatus*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Brown / sea trout (*Salmo trutta*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Bullhead (*Cottus gobio*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Chub (*Squalius cephalus*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Dace (*Leuciscus leuciscus*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
European eels (*Anguilla anguilla*)	2012	Canal Head (30174)
Gudgeon (*Gobio gobio*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Minnow (*Phoxinus phoxinus*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Perch (*Perca fluviatilis*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Pike (*Esox lucius*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Roach (*Rutilus rutilus*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)
Stone loach (*Barbatula barbatula*)	2019	The Beck, Thornton Bridge DERCORS14 (3843)

3.2.10 The Environment agency records are from locations representative of the habitat conditions likely to be present on site, and as such species present within **Tables 3.1** and **3.2**, are potentially present on site. There are no records of river and sea lamprey, bleak, ruffe or burbot. The only species recorded that is associated with the River Derwent SAC and SSSI is bullhead.

3.2.11 The population of Bullhead that is likely to be present within the draft order limits are not likely linked to the River Derwent SAC and SSSI population, because they are located 4.43km upstream of the Derwent.

3.2.12 European eel are considered to be present within the watercourses throughout the draft Order Limits , however they are likely to be more prevalent within the larger drains.

3.2.13 There were no records of lamprey in the Foulness River, Bielby Beck System, and Pocklington Beck at the locations closest to the draft Order Limits. This is likely due to the habitats being lowland, slow flowing drainage watercourses, which are likely to be predominantly silt sediment, with a lack of suitable spawning habitat (shallow gravels / pebbles in flowing water). Although lamprey species are recorded in the River Derwent SAC and SSSI, and may make use of the watercourses within the draft Order Limits that are connected to the River Derwent, the watercourses within the Draft Order Limits do not provide any migratory routes to upstream reaches and are considered likely to provide sub-optimal habitat conditions for breeding lamprey, and therefore are unlikely to be an important habitat for the populations of river or sea lamprey associated with the River Derwent SAC and SSSI.

3.3 Reptiles

3.3.1 The background data search returned no records of reptiles within the draft Order Limits, but returned 37 records of common lizards (*Zootoca vivipara*), 69 records of adder (*Vipera b*erus), and seven records of slow-worm (Anguis fragilis) from within 2km. All three reptile species have been recorded at Allerthorpe Common LWS, the closest boundary of Allerthorpe Common is 1.2km from the draft Order Limits.

3.3.2 The habitats within the solar PV development area have been assessed as sub-optimal to support reptiles due to large areas of farmed arable and pasture land. The limited rough grassland and scrub habitats that form field margins, along with the bases of hedgerows and woodland edges offer suitable sheltering and foraging habitat which may support small populations of common reptile species. However, this is fragmented into small areas across the solar PV development area, indicating poor habitat connectivity. Rubble piles scattered across the solar PV development area provide suitable reptile refugia and potential hibernacula. While manure piles within the agricultural landscape offer basking, hunting and egg laying opportunities, many are located within open arable farmland and lack connectivity to suitable reptile habitat.

3.3.3 The underground grid connection corridor is located within the same agricultural landscape as the solar PV development area. A review of aerial imagery shows the habitats are likely to be of similar suitability for reptiles, with habitats present around the field margins, woodland margins, around the base of hedgerows, and within any areas of rough grassland or scrub. The land around Pocklington canal includes coastal and floodplain grazing marsh

(habitat of principal importance), slow moving water with marginal vegetation and mosaic habitats, which is considered to be particularly suitable for grass snake.

3.4 Water vole and Otter

3.4.1 The background data search returned three records of water vole within the draft Order Limits, and a further 20 records within 2km, although all water vole records are from the year 2000 or earlier.

3.4.2 The background data search returned five records of otter within the draft Order Limits, and a further 38 records within 2km, the most recent of which was recorded in 2003. These records were associated mainly with the River Derwent, Pocklington Canal, and Bielby Beck.

3.4.3 Otter is a designated feature for some of the international and national statutory designated sites included in the study area. This comprises the Lower Derwent Valley SAC, River Derwent SAC, Melbourne and Thornton Ings SSSI, River Derwent SSSI, Pocklington Canal SSSI, and Lower Derwent Valley NNR. The Pocklington Canal SSSI is within the draft Order Limits, and Melbourne and Thornton Ings SSSI are hydrologically linked, or linked via other suitable habitat, to the Site.

3.4.4 There are watercourses across the solar PV development area which potentially provide suitable habitat for water vole and otter. The watercourses vary in habitat suitability, depending on management, and flow rates. The larger watercourses have potential to provide suitable habitat for water vole and otter. The smaller, periodically dry ditches, are considered to provide suboptimal habitats, water vole, as well as seasonal commuting opportunities for otter.

3.4.5 The underground grid connection corridor contains similar watercourses to the solar PV development area with the addition of Pocklington Canal and Bielby Beck, which are likely to be permanent watercourses, providing good habitat suitability for water vole and otter, and providing a corridor for dispersal.

3.4.6 The terrestrial habitat within the draft Order Limits mostly comprises open agricultural fields which are likely to provide limited opportunities for otters to create holts or resting places. However, the less disturbed areas such as the scattered pockets of woodland, scrub and hedgerows adjacent to watercourses may provide suitable terrestrial habitat for otter.

3.5 Other priority species or species of principal importance

3.5.1 The background data search from the North and East Yorkshire Ecological Data Centre returned records of brown hare (*Lepus europaeus*), harvest mouse (*Micromys minutus*), water shrew (*Neomys fodiens*) and western European hedgehog (Erinaceus europaeus) within 2km of the draft Order Limits. The closest records to the draft Order Limits are European hedgehog recorded in 2001, 2002 and 2019 within the draft Order Limits.

3.5.2 Multiple brown hares were incidentally recorded throughout the solar PV development area during the badger survey carried out by RSK in November 2024.

3.6 Invasive non-native species

3.6.1 The desk study returned records of five invasive non-native flora species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), including; Himalayan Balsam (*Impatiens g*landulifera), Rhododendron (*Rhododendron ponticum*), Nuttall's Waterweed (*Elodea nuttallii*), Japanese knotweed (*Reynoutria japonica*), and Canadian Waterweed *(Elodea canadensis*). The closest record to the draft Order Limits is Canadian pondweed recorded within Pocklington Canal as recently as 2016. Nuttall's waterweed has also been recorded within Pocklington Canal approximately 400m from the draft Order Limits.

3.6.2 The closest records of Himalayan balsam to the draft Order Limits are within Field 12.i, recorded within 2007. Himalayan balsam has been recorded along Pocklington Canal within the underground grid connection corridor during 2020 and within woodland directly north of Fields 12.i and 12.j during 2007. Himalayan balsam has also been recorded within land directly adjacent to the solar PV development area including within Breckstreet Farm Disused Airfield LWS, located adjacent to Fields 13.zg, 13.zf, 13.zc, 13.zb, 13.zn, 13za and 13.zo. The citation site description for Breckstreet Farm Disused Airfield LWS provided by the North and East Yorkshire Ecological Records centre states Himalayan balsam is known to be present in the LWS.

3.6.3 Three records of Japanese Knotweed have been provided. The closest record of Japanese Knotweed is approximately 575m from the draft Order Limits at Allerthorpe Golf and Country Club. The other two records of Japanese Knotweed are over 1km from the draft Order Limits.

3.6.4 As detailed within **Appendix 7.1: Habitat Survey Report (Solar PV Development Area)** in **Volume 3**, rhododendron was identified along the southwestern boundary of Field 13.x within Land Parcel D and along the northeastern boundary of Field 13.zg within Land Parcel D during the UK habitat classification survey undertaken between August 2023 and June 2024.

3.6.5 Rhododendron has been recorded within the draft Order Limits and due to the records of other invasive non-native plant species in close proximity to the draft Order Limits it is likely other non-native plant species are located within the draft Order Limits.

3.6.6 The background data search provided records of the following fauna species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended); Grey squirrel (*Sciurus carolinensis*), American mink (*Neogale vision*), Egyptian goose (*Alopochen aegyptiaca*), and Black swan (Cygnus *atratus*), within 2km of the draft Order Limits. The latest records of American mink provided by the North and East Yorkshire Ecological Records Centre

are from 1990. However, given the hydrological connectivity of the draft Order Limits to other watercourses within the surrounding landscape, American mink are likely to be present within the draft Order Limits. There are numerous anecdotal reports of signal crayfish present in the River Derwent.

3.6.7 Records of other invasive species, not listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), include historic introductions, that are prevalent throughout the UK: a Shrimp (Northern River Crangonyctid (*Crangonyx pseudogracilis*)), Jenkins' Spire Snail (*Potamopyrgus antipodarum),* Heath Star Moss (*Campylopus introflexus*), and six beetle species (*Coleoptera*).

Figures

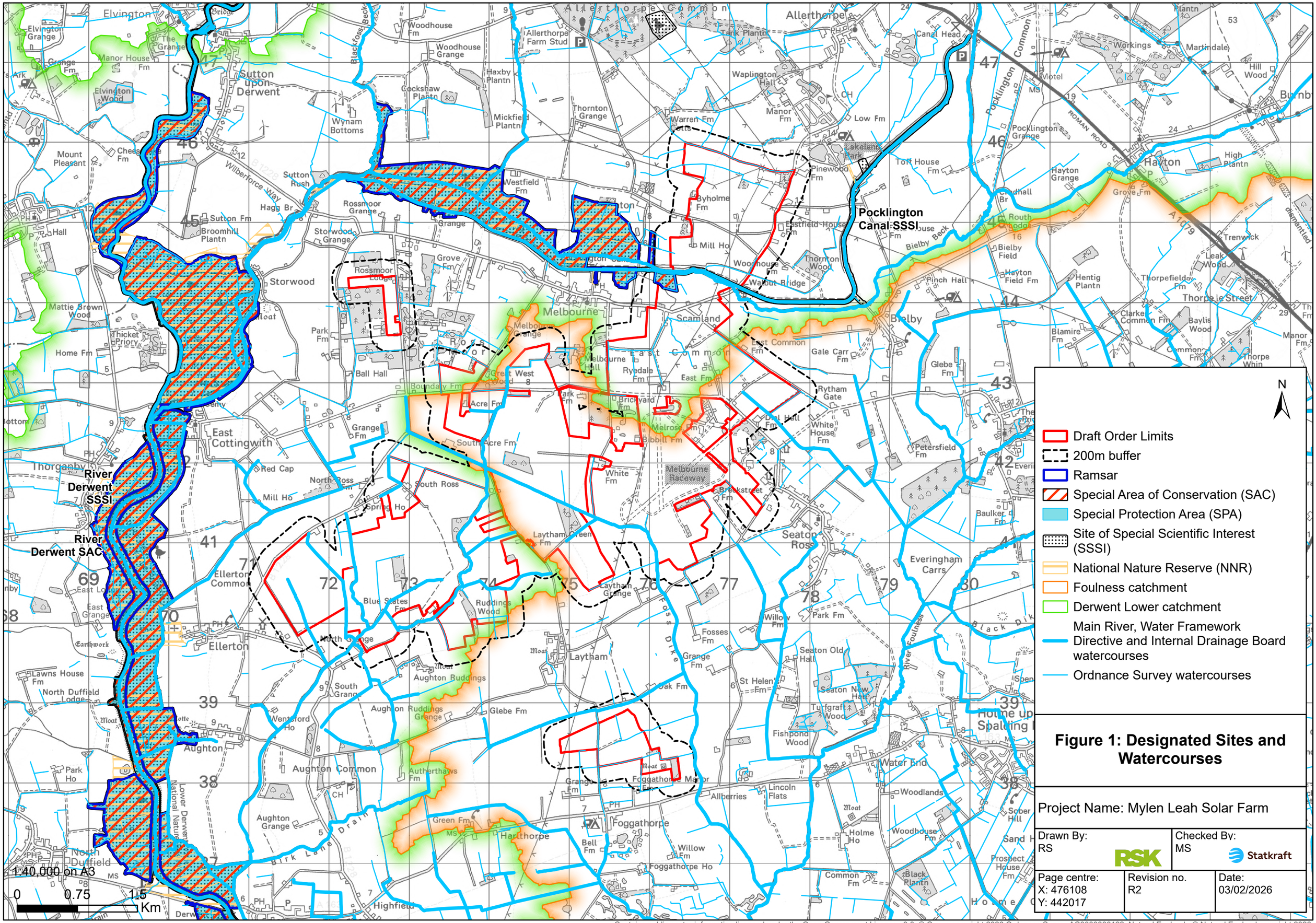


Figure 1: Designated Sites and Watercourses

Project Name: Mylen Leah Solar Farm

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RS	MS

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Appendix A: Desk Study Records

The following tables present records of protected and notable species within 2km of the draft Order Limits. These species records were obtained from North East Yorkshire Ecological Data Centre. The scientific and common names for species are given, as well as their level of designation. Where a species is not listed, this does not indicate absence, but that the Record Centre does not currently hold records from the search area.

Table A1: Protected Species Records within 2km of the draft Order Limits

Scientific name	Common name	Designation	Most Recent	Any records within 100m
Crustacean				
Austropotamobius pallipes	White-clawed Crayfish	WCA5, S41	1997	
Mammals				
Arvicola amphibius	Water Vole	WCA5, S41, RL-EN	2000	☒
Lutra lutra	Otter	Habs regs, WCA5, S41	2003	☒
Reptiles				
Anguis fragilis	Slow-worm	WCA5, S41	2023	
Vipera berus	Adder	WCA5, S41	2024	
Zootoca vivipara	Common Lizard	WCA5, S41	2024	
WCA5: Wildlife & Countryside Act 1981 Schedule 5 - Animals which are protected **S41**: Natural Environment and Rural Communities Act 2006 (Section 41), **RL-EN:** IUCN Red List of Threatened Species – Endangered **Habs regs**: Conservation of Habitats and Species Regulations 2017				

Table A2: Noteworthy Species Records within 2km of the draft Order Limits

Scientific name	Common name	Designation
Fish		
Anguilla anguilla	Eel	S41, RL-CR,
Cobitis taenia	Spined Loach	S41
Salmo trutta	Brown/Sea Trout	S41
Invertebrates		
Agabus labiatus		Notable:B
Agabus uliginosus		Notable:B
Amara (Amara) famelica	Early Sunshiner	S41, GB RDB(EN), NR

Scientific name	Common name	Designation
Andrena (Cnemidandrena) nigriceps	Black-headed Mining Bee	Notable:B
Andrena (Poliandrena) tarsata	Tormentil Mining Bee	S41
Andrena humilis	Buff-tailed Mining Bee	Notable:B
Apamea remissa	Dusky Brocade	S41
Attactagenus plumbeus		Notable:B
Bagous (Bagous) lutulosus		Notable:A
Bembidion fumigatum		NS, Notable:B
Bombus distinguendus	Great Yellow Bumblebee	Notable:B
Bombus humilis	Brown-banded Carder Bee	S41
Bombus muscorum	Moss Carder Bee	S41
Bombus rupestris	Hill Cuckoo Bee	Notable:B
Ceramica pisi	Broom Moth	S41
Ceutorhynchus atomus		Notable:A
Ceutorhynchus resedae		Notable:B
Coenonympha pamphilus	Small Heath	S41
Colobaea punctata		Notable
Dinothenarus pubescens		Notable:B
Dioxyna bidentis		Notable
Dolichovespula media		Notable:A
Dorytomus hirtipennis		Notable:A
Dorytomus salicinus		Notable:B
Dorytomus salicis		Notable:A
Dytiscus circumcinctus		NS
Ecliptopera silaceata	Small Phoenix	S41
Ectemnius (Clytochrysus) ruficornis		Notable:B
Erynnis tages	Dingy Skipper	S41, GB RDB(VU)
Gabrius bishopi		Notable:B
Glocianus punctiger		Notable:B

Scientific name	Common name	Designation
Grypus equiseti	Horsetail Weevil	Notable:B
Gymnetron veronicae	Brooklime Gall Weevil	Notable:B
Gymnetron villosulum		Notable:B
Helochares punctatus		NS
Helophorus (Helophorus) nanus		NS, Notable:B
Helophorus strigifrons		NS, Notable:B
Hydroporus neglectus		NS
Lasioglossum (Lasioglossum) quadrinotatum	Four-spotted Furrow Bee	Notable:A
Lasiommata megera	Wall	S41
Lasiopogon cinctus	Spring Heath Robberfly	NS, Notable
Malthodes pumilus		NS
Methocha articulata		Notable:B
Neoascia geniculata		Notable
Neoascia interrupta		NS, Notable
Nysson trimaculatus		Notable:B
Oedostethus quadripustulatus		Notable:A
Oxystoma cerdo		Notable:B
Phytobius leucogaster		Notable:B
Platypalpus commutatus		NS
Polydrusus flavipes		Notable:B
Priocnemis (Priocnemis) schioedtei		Notable:B
Pterostichus anthracinus		NS, Notable:B
Satyrium w-album	White-letter Hairstreak	WCA5, S41, GB RDB(EN)
Scotopteryx chenopodiata	Shaded Broad-bar	S41
Siphonella oscinina		Notable
Sphecodes crassus	Swollen-thighed Blood Bee	Notable:B
Sphecodes ferruginatus	Dull-headed Blood Bee	Notable:B
Sphecodes reticulatus	Reticulate Blood Bee	Notable:A

Scientific name	Common name	Designation
Stenus carbonarius		Notable:B
Temnocerus coeruleus		Notable:B
Temnocerus longiceps		Notable:B
Thrypticus tarsalis		NS
Tournotaris bimaculata		Notable:B
Tropiphorus terricola		Notable:B
Xanthorhoe ferrugata	Dark-barred Twin-spot Carpet	S41
Mammals		
Erinaceus europaeus	Hedgehog	S41, GB RDB(VU)
Lepus europaeus	Hare	S41
Micromys minutus	Harvest Mouse	S41
Lichen		
Diplotomma hedinii		NS
Mollusc		
Viviparus contectus	Lister's River Snail	NS
Stonewort		
Nitella mucronata	Pointed Stonewort	NS
Tolypella prolifera	Great Tassel Stonewort	S41, GB RDB(EN)
Plants		
Bromus secalinus	Rye Brome	NS
Buxus sempervirens	Box	NR
Hyacinthoides non-scripta	Bluebell	WCA8
Maianthemum bifolium	May Lily	GB RDB(VU), ENG BSBI RDB(VU), NR
Myosotis stolonifera	Pale Forget-me-not	NS
Oenanthe fistulosa	Tubular Water-dropwort	S41, GB RDB(VU), ENG BSBI RDB(VU)
Persicaria mitis	Tasteless Water-pepper	GB RDB(VU), ENG BSBI RDB(VU), NS
Pinus sylvestris	Scots Pine	NS
Potamogeton friesii	Flat-stalked Pondweed	GB RDB(VU), ENG BSBI RDB(VU), NS
Scleranthus annuus	Annual Knawel	S41, GB RDB(EN), ENG BSBI RDB(EN)
Sium latifolium	Greater Water-parsnip	S41, GB RDB(EN), ENG BSBI RDB(EN), NS

Scientific name	Common name	Designation
Stellaria palustris	Marsh Stitchwort	S41, GB RDB(VU), ENG BSBI RDB(VU)
WCA5: Wildlife & Countryside Act 1981 Schedule 5 - Animals which are protected **S41**: Natural Environment and Rural Communities Act 2006 (Section 41), **RL-EN:** IUCN Red List of Threatened Species – Endangered **Habs regs**: Conservation of Habitats and Species Regulations 2017		

[1] Environment Agency (2025) Environment Agency Ecology & Fish Data Explorer FW Fish and TraC Fish data from 1985 to 2025 within the Fowlness and Derwent Lower-Yorkshire catchment. Available online: EA Ecology & Fish Data Explorer

[2] Chartered Institute of Ecology and Environmental Management (2019), Advice Note on the Lifespan of Ecological Reports & Surveys. Chartered Institute of Ecology and Environmental Management. Available online: Advice-Note.pdf

[3] Joint Nature Conservation Committee (2025) Conservation designations for UK taxa. Available online: Conservation designations for UK taxa | Advisor to Government on Nature Conservation | JNCC

[4] IUCN (2022) The IUCN Red List of Threatened Species. Burbot (Lota lota) Available online: Lota lota (Burbot)