

SITE NAME:

**Strategic Exe Weirs  
Bolham Weir  
Tiverton  
Devon**

TITLE:

**Ecological Impact Assessment (EclA)  
Report**

FOR:

**Westcountry Rivers Trust**

**March 2024**



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<i>Reference: Bolham Weir, Tiverton – EclA Report</i>			
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## Summary

An updated ecological impact assessment was undertaken of habitats within and adjacent to Bolham Weir on the River Exe, near Tiverton. The updated ecological impact assessment was in relation to proposals for the construction of a fish pass, with associated small scale engineering works.

Located on the River Exe, approximately 2.5 km north of Tiverton, Bolham Weir was bordered by broad-leaved scattered trees to the east and west, with improved grassland to the north and south. The wider landscape comprised the A396 immediately adjacent to the western boundary, alongside a mosaic of small pastoral field, residential properties and agricultural complexes, connected by mature hedgerows, tree lines and small lanes. Access to the weir was proposed off the A396, and also through Marsh Farm and across improved grassland.

All habitat types were identified and mapped, with the dominant habitat being the weir, with existing eel pass and running water (River Exe) in both 2020 and 2024. Additional habitats within the Site included scattered broad-leaved trees, improved grassland, fence and wall. At the time of the surveys in both 2020 and 2024, no rare or nationally scarce botanical species were identified.

No evidence of protected species was noted during the the original 2020 survey, however, evidence of breeding birds was recorded during the update 2024 survey in the form of a nest in scattered trees at the true right bank. The River Exe was considered to provide suitable habitat for foraging and commuting bats and otters with the wall at the true left bank, below the weir, providing elevated sprainting locations for otters. Although outside the zone of impact and unlikely to be impacted by the proposed works, a mature ash was noted on the true right bank with evidence of extensive ash die-back. Should this tree be impacted and/or require removal, a further assessment for roosting bats would be necessary.

In the absence of mitigation measures, the proposed development was considered likely to have at worst, short-term, adverse effect at the *'Local'* level. However, based on the proposed works and plans provided, and by following the proposed mitigation and precautionary measures, the development was not considered to have any significant residual effect to important ecological features within or adjacent to the Site. Provided the proposed mitigation, compensation and enhancement measures are followed, the development was considered to be consistent to relevant conservation legislation, National Planning Policy Framework (revised 2023) and local policies. No European protected species licences were required in this instance. In addition, the proposed works will contribute to the long-term enhancement of the catchment for freshwater fish, especially Atlantic salmon, eel and sea/brown trout. The ecological mitigation as outlined must be followed and conditioned.

This report is valid for a period of 12 months from the date of the survey.

## 1 Introduction

1.1 Colmer Ecology was commissioned by Westcountry Rivers Trust (WRT) to undertake an update ecological impact assessment (EclA) of habitats within and adjacent to Bolham Weir near Tiverton, Devon, hereinafter referred to as the Site. The EclA comprised a biological desk study, with a phase 1 habitat survey, a protected species habitat assessment and a ground level tree assessment (GLTA) for roosting bats. The EclA provided information on the potential for and, if apparent, evidence of use of the Site by protected species, as well as requirements for any further Stage 2 surveys.

1.2 It is understood that proposals for the Site include the following:

### *True Left Bank*

- Smolt screen near adjacent mill leat; and
- Smolt notch on weir.

### *True Right Bank*

- Removal of existing eel tiles/pass and replacement;
- Removal of baulk fish pass;
- New fish pass and channel on true right bank;
- Weir notch;
- Rip rap infill; and
- Associated, small scale engineering works.

## Background

1.3 Colmer Ecology previously surveyed the Site in November 2020, with a subsequent ecology report provided in April 2021. The original 2020 survey comprised a preliminary ecological appraisal (PEA) including a biological desk study, and a phase 1 habitat survey with protected species habitat assessment. Whilst no further Stage 2 surveys were required in 2020, a pre-construction otter and water vole presence/likely absence survey was required prior to any development works commencing.

1.4 The 2024 update EclA was carried out to assess whether conditions had changed significantly since the 2020 visit, and based on new proposals.

1.5 It has been confirmed by WRT that the proposal is funded by, '*Natural England's Species Recovery Programme in 2024 and has been awarded by specifically justifying conservation of *Salmo salar* (Atlantic salmon), *Salmo trutta* (Sea/brown trout), and *Anguilla anguilla* (European eel)*'. (Pers. comm. Mr A. Dowding, WRT to Colmer Ecology, 27<sup>th</sup> February 2024).

### **Site Description**

- 1.6 The Site was small at approximately 220 square metres (sqm) and located at National Grid Reference (NGR) SS 94854 15307, approximately 2.5 km north of Tiverton (Figure 1). The Site was bordered by broad-leaved scattered trees to the east and west, with improved grassland to the north and south. The wider landscape comprised the A396 immediately adjacent to the western boundary, alongside a mosaic of small pastoral field, residential properties and agricultural complexes, connected by mature hedgerows, tree lines and small lanes. Access to the weir was proposed off the A396, and also through Marsh Farm and across improved grassland.

### **Scope of Surveys**

- 1.7 The objectives of the 2024 survey were to:
- Carry out a biological desk study within 2 km of the Site;
  - Carry out a phase 1 habitat survey and map all habitat types within the Site, and where possible, described those immediately adjacent;
  - Carry out a protected species habitat assessment;
  - Carry out a ground level tree assessment; and
  - Establish the need for further Stage 2 surveys and provide recommendations for ecological enhancements/mitigation, where necessary.

### **Scope of Evaluation/Assessment of Ecological Features**

- 1.8 The following were considered regarding the findings from the baseline ecological survey, and the evaluation and assessment of impacts:

#### *Evaluation*

- Evaluate the significance of ecological features using criteria set out by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018) based on a geographical scale of importance from Negligible to International and European (i.e. high importance).

#### *Impact Assessment*

- Assess whether important ecological features will be subject to impacts, to characterise these impacts and their effects.

#### *Mitigation, Compensation, Enhancement and Monitoring Measures*

- Propose suitable mitigation/compensation/enhancements where necessary and advise on the need for any European protected species licences; and
- Set out the requirements for post-construction monitoring.

*Residual Effects*

- To provide an assessment of the significance of any residual effects following development.

**Legislation and Planning Context**

1.9 Although it was not the purpose of this report to present legislation and planning context in relation to the proposal, their applicability was explained where appropriate.

1.10 The following wildlife legislation and policy were considered:

- The Conservation of Habitats and Species Regulations (as amended) 2017 amended by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019;
- The Wildlife and Countryside Act (WCA) (as amended) 1981;
- The Countryside and Rights of Way (CROW) Act 2000;
- The Natural Environment and Rural Communities (NERC) Act 2006;
- National Planning Policy Framework (NPPF) revised 2023;
- Environment Act 2021;
- Mid Devon Local Plan 2013 – 2033; and
- The Devon Biodiversity Action Plan.

1.11 This report was written following the CIEEM guidelines for ecological report writing (2017a).

**Caveat**

1.12 It should be noted that a phase 1 habitat survey does not aim to identify all botanical species within a site or constitute a full contaminated land/invasive species assessment. In addition, protected species can be highly mobile and be found in buildings/structures or habitats at any time of year. Although Colmer Ecology is confident in the survey results, we cannot ensure that protected species will/will not be present on Site at any other time. Descriptions of Site conditions and photographs are based on the update survey in February 2024, with reference to the 2020 survey where required. In addition, assessments of ecological impacts were based on the information supplied by WRT.

**Nomenclature**

1.13 For ease, common names were used throughout this report, however, where no common name existed or it was not possible to identify to species level, genus/family names were used. Details of indicative Latin names were provided in Appendix 1.



## **2 Methodology**

### **2.1 Biological Desk Study**

2.1.1 Following guidance produced by CIEEM (2017b), records of statutory and non-statutory designated habitats and protected or noteworthy species were requested from the Devon Biodiversity Record Centre (DBRC) within a 1 km desk study area based on the central grid reference NGR SS 94855 15288. It should be noted that a DBRC data request was also completed in 2020. In addition, records of *'Priority Habitat Inventory'* areas, ancient woodland and granted European protected species licence (EPSL) applications were reviewed from the government-based website MAGiCMap within a 2 km desk study area. Colmer Ecology's own biological records, protected species licences and knowledge of local ecological designations were also reviewed.

### **2.2 Phase 1 Habitat Survey**

2.2.1 The Site was originally subjected to a phase 1 habitat survey on 18<sup>th</sup> November 2020 by Mr H. Colmer BSc (Hons) Dip MCIEEM<sup>1</sup> FLS<sup>2</sup> a Natural England licensed<sup>3</sup> associate ecologist. The update phase 1 habitat survey was completed on 6<sup>th</sup> February 2024, also carried out by Mr H. Colmer with support from assistant ecologist Miss I. Mathews BSc (Hons). For each survey, the habitats present within, and where possible, surrounding the Site was mapped in accordance with the *'Handbook for Phase 1 Habitat Survey – a Technique for Environmental Audit'* (Joint Nature Conservation Committee, 2010 [Revised in 2016 with minor corrections]). Habitats and features of interest were described, with botanical species recorded. In addition, a colour coded habitat map (Figure 2) and annotated photographs of the Site (Figure 3 and 4) were produced. Non-native invasive species were also identified (where possible) and mapped where appropriate.

### **2.3 Protected Species Habitat Assessment**

2.3.1 The surveys also included an assessment of the potential for the Site to support protected species due to the habitat typologies present. This was based on professional experience, and also reviewing industry standard habitat assessment methodologies, however, the survey did not include any specific methodologies designed to demonstrate presence/likely absence of protected species themselves.

### **2.4 Ground Level Tree Assessment**

2.4.1 During the 2024 update survey, any tree within the Site likely to be impacted by the proposed works was subject to a GLTA by Mr H. Colmer (bat class 2 survey licence) to assess suitability for roosting bats. Survey methodology followed that suggested within the Bat

<sup>1</sup> Full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM)

<sup>2</sup> Fellow of the Linnaean Society (FLS)

<sup>3</sup> Great crested newt licence. Barn owl licence. Dormouse licence. Bat licence.

Conservation Trust (BCT), Bat Surveys for Professional Ecologists – Good Practice Guidelines 4<sup>th</sup> Edition (Collins, 2023) as well as the Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-Care and Ecology Professionals (2018) and the Bat Tree Habitat Key (BTHK, 2023). Each tree was searched for any potential roosting features (PRF) for bats including cracks (from catastrophic fractures or tears), extending holes, partially detached and plating ivy, cankers with cavities, and splits or flaking bark (list is not exhaustive). Other field signs searched for included dark streaking below holes and cracks, droppings and staining, as well as bat themselves.

2.4.2 Any accessible PRF was assessed and inspected using high powered LED torches and close focussing binoculars only at this stage. Where a suitable PRF was present, a general description, height above ground, orientation and location with respect to the stem (Collins, 2023) were recorded.

2.4.3 During the GLTA, suitability of trees for roosting bats was categorised as *'none – either no PRF in the tree or highly unlikely to be any'*, *'FAR – further assessment required to establish if PRFs are present in the tree'* or *'PRF – a tree with at least one PRF present'* (Collins, 2023).

## 2.5 Evaluation/Assessment of Ecological Features

2.5.1 Following CIEEM (2018), each ecological feature (i.e. designated sites, habitats on and off Site and protected/noteworthy species) was evaluated using the following geographical scale:

- International value (internationally designated sites or those meeting criteria for international designations);
- National (such as Site of Special Scientific Interest [SSSI] or those meeting criteria for national designations – sites with significant Priority Habitat or sustaining Red Data Book species);
- Regional (regional designation – sites with significant regional Biodiversity Action Plan [BAP] habitats or sustaining regional BAP species);
- County (county designation – sites with significant county Biodiversity Action Plan [BAP] habitats or sustaining county BAP species or rarities species, County Wildlife Sites [CWS]);
- District (district level designation);
- Local/Parish (local/parish/neighbourhood level designation);
- Site (interest at the site level only); and
- Negligible.

2.5.2 In addition, schedules and annexes under the Conservation of Habitats and Species Regulations (as amended) 2017, amended by the Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019, WCA (as amended) 1981, any local designation or conservation lists were also utilised/reviewed.

## 2.6 Assessment of Effects

2.6.1 Following CIEEM (2018), an assessment of effects without mitigation of each ecological feature (i.e. designated sites, habitats on and off Site and protected/noteworthy species) was undertaken using the following timescale:

- Acute (immediate and discrete);
- Short term (0 – 3 years);
- Medium term (3 – 10 years); and
- Long term (> 10 years).

2.6.2 Following the description of suitable mitigation measures, compensation and enhancement measures, the residual effects were also established, as suggested by CIEEM (2018).

## 2.7 Survey Constraints and Best Practice

### *Biological Desk Study*

2.7.1 It should be noted that an absence of desk study records for particular species does not necessarily convey an absence of such species in that area and is often a facet of under-recording. Because the desk study was designed to give an overview of the species already recorded in the local area, it was not considered to be a significant constraint.

### *Phase 1 Habitat Survey*

2.7.2 The surveys in both 2020 and 2024 were undertaken at a suitable time of year and under good weather conditions with methodology proposed following industry standards and recommended guidelines. Although the surveys were undertaken in late autumn and winter, a phase 1 habitat survey can be carried out at any time of year and provides an initial baseline assessment of ecological conditions. Although some botanical species would not yet be flowering, the habitat types identified on Site were not considered significantly diverse and the surveys in November and February were considered accurate. Furthermore, due to the size of the Site and easily identified habitats, it was not considered proportionate to delay any survey until mid-spring or summer when most botanical species would be flowering. During the 2020 survey, the true right bank (looking downstream) of the Site could not be accessed, however, full access was possible on the true left bank. During the 2024 survey, no constraints were encountered during the survey with all parts of the Site accessible and with good visibility.

*Ground Level Tree Assessment*

2.7.3 The GLTA was undertaken at the optimal time of the year, with excellent visibility of each tree feature. Although a ground level bat tree roost assessment aims to evaluate each tree present, it can sometimes be difficult to locate roosts within trees (Collins, 2023). This is largely due to the behaviour of bats using tree roosts (for example switching between roosts), as well as lack of persistent bat evidence and limitation for features located at height. This assessment does not include an evaluation of tree condition, or any arboricultural survey.

### **3 Results**

#### **3.1 Biological Desk Study**

##### *Statutory Designated Sites*

- 3.1.1 According to DBRC, Bolham Weir was not within any statutory designated site boundaries. However, according to data held on MAGiCMap, the Site was within the impact risk zones of Tidcombe Lane Fen Site of Special Scientific Interest (SSSI) and Hare's Down, Knowstone and Rackenford Moors SSSI, as well as 10 km south-east of Culm Grasslands Special Area of Conservation (SAC). Additionally, Palmerston Park Wood Local Nature Reserve (LNR) was located 3.2 km south, with the Grand Western Canal Country Park LNR located 3.3 km south-east.

##### *Other Designated Sites/Information*

- 3.1.2 Based on data provided by DBRC, one County Wildlife Site (CWS), one proposed CWS (pCWS) and four Unconfirmed Wildlife Site (UWS) were noted within the desk study area. Although none were in proximity to the Site, the closest was Knightshayes pCWS, approximately 400 m east from the Site (at its closest).
- 3.1.3 Based on MAGiCMap, an area of '*Priority Habitat Inventory*' comprising coastal and floodplain grazing marsh was noted within and surrounding the Site. No other habitats were noted within the Site, although several were present in the desk study area, including good quality semi-improved grassland (non-priority), deciduous woodland, traditional orchards, woodpasture and parkland BAP priority habitat and, '*no main habitat but additional habitats present*'. The Site was within the National Habitat Network All Habitats Combined – Network Enhancement Zone 1.
- 3.1.4 The Site was not within the consultation zones for great crested newt and cirl bunting. The Site was not within the South Hams SAC landscape connectivity or sustenance zones for greater horseshoe.
- 3.1.5 According to Swift Mapper, numerous records of screaming parties were noted in proximity to the Site, with the closest record of an active, occupied nest noted in 2022 approximately 1.9 km to the south-east.

##### *Ancient Woodland*

- 3.1.6 Several areas of ancient woodland were present within the desk study area. These included Coydon Copse, an ancient replanted woodland located approximately 950 m north-east with an unnamed area of ancient replanted woodland located 1.5 km north. Furthermore, Rock Copse ancient and semi-natural woodland was located 1.6 km north-west, with Allers Wood ancient and semi-natural (as well as ancient replanted), located 1.6 km north-east.

*European Protected Species Licence Applications*

3.1.7 When reviewing the most recent (2022) Natural England licence update on MAGiCMap, a total of five EPSL applications were located within the desk study area and all related to bats from 2015 to 2024. The closest was approximately 580 m south-west of the Site for the impact on resting places of brown long-eared, common and soprano pipistrelles, and greater and lesser horseshoes.

*Fauna and Flora Data*

3.1.8 In 2024, a total of 50 records were provided by DBRC within the 1 km desk study area. Records spanned a date range from 1967 to 2014. Of these, three protected and notable species records were located in close proximity to the Site, with 29 other species also noted. A number of the records were provided at the 1 km, or 2 km resolution only, with definitive location not supplied.

3.1.9 Amphibians: No records of protected or notable species of amphibians were provided.

3.1.10 Bats: A total of 15 records between 1992 and 2014 were provided and for five confirmed species, three genus and unidentified Chiroptera. None of the records were from within the Site boundary, with the closest approximately 479 m south-east of the Site. Bat records included:

- Common pipistrelle (2);
- Soprano pipistrelle (2);
- Serotine (2);
- *Plecotus* sp. (2);
- Noctule (1);
- Brown long-eared (1)
- *Myotis* sp. (1);
- *Pipistrellus* sp. (1); and
- Chiroptera (3).

3.1.11 Birds: Only a single record of protected and notable bird species was provided by DRBC within the desk study area, comprising a red-breasted merganser, approximately 833 m north-west of the Site.

3.1.12 Flora records: Although none were located within the Site boundary, a total of four records for two plant species between 2002 and 2014 were provided within the desk study area. Both species were listed under Schedule 9 Part 2 of the WCA (as amended) 1981, and

included Himalayan balsam and Japanese knotweed. The single record of Himalayan balsam was within the vicinity of the Site, located approximately 238 m south.

3.1.13 Fungi: No records of protected or notable species of fungi were provided.

3.1.14 Invertebrates: Records of 23 invertebrates, of 23 species and from 1967 to 2004 were provided, with twelve species listed under the Section 41 of the NERC Act (2006). However, none of the records were in the vicinity of the Site.

3.1.15 Reptiles: Only a single record of a slow-worm was provided in 2009, located approximately 528 m south-east of Site.

3.1.16 Terrestrial mammals (excluding bats): In total, four records of three species of terrestrial mammal between 1986 and 2012 were provided, including two records of European otter, one record of Eurasian badger, and one record of hazel dormouse. Of these records, two were located within close proximity to the Site comprising otter approximately 238 m south of Site and, '*within the River Exe*' (DBRC, 2024), and badger located approximately 262 m north-east of the Site. The dormouse and additional otter records were some distance from the Site.

## 3.2 Phase 1 Habitat Survey

3.2.1 The habitats present within and where possible, immediately adjacent to the Site were identified and described below based on the 2024 survey. A colour coded habitat plan (Figure 2) with associated target notes (TN) and annotated photographs of habitats (Figures 3 and 4) were also provided.

3.2.2 Scattered scrub (off Site): An area of scattered scrub was noted at the true right bank, with species comprising hemlock water-dropwort, snowdrop, daffodil, dog rose, burdock, and rare occurrences of gorse.

3.2.3 Scattered broad-leaved trees (on and off Site): Several areas of scattered broad-leaved trees were noted adjacent to the Site, which were identified in 2020 and remained in 2024. One area was noted above the weir on the true left bank with species comprising alder, ash, hazel, pedunculate oak, cherry, dog rose, and *Salix* species. An understorey was also present containing areas of dense bramble scrub with ivy, herb-robert, cleavers, common nettle, hedge woundwort and dandelion. A small patch of scattered broad-leaved trees was also evident below the weir on the true left bank with species comprising immature alder, sycamore and *Salix* species. Finally, a small island of trees with no access was noted within the water channel, comprising sycamore, ash, *Salix* species and alder.

- 3.2.4 During the 2024 survey, access to the true right bank was possible with an area of scattered broad-leaved trees identified below the weir along the true right bank. Woody species comprised *Salix* species, alder (with epicormic growth), hawthorn and rare occurrences of holly. Although not within the Site, an individual, outlying ash tree (T1) with significant evidence of ash die-back was noted to the west.
- 3.2.5 Semi-improved species poor grassland (off Site): Although not within the Site, several areas of semi-improved species poor grassland were evident during the 2020 survey, and remained in 2024, to the east and south-east of the Site. Grass species comprised creeping bent, perennial rye-grass and annual meadow-grass. Other botanical species comprised ribwort plantain, cleavers, and geranium species.
- 3.2.6 Improved grassland (off and on Site): Improved grassland was noted adjacent to the true right and left banks, with evidence of grazing. The grassland was dominated by creeping-bent with the addition of annual meadow-grass and perennial rye-grass. Additional botanical species comprised common daisy, clover species, yarrow, dandelion, common sorrel, chickweed and soft rush.
- 3.2.7 Running water (on Site): The dominant habitat within the Site was the River Exe.
- 3.2.8 Intact species-poor hedge (off Site): Although not within the Site, an intact species-poor hedge was evident along the A396, to the east of Site, with the hedge dominated by beech.
- 3.2.9 Fence (on and off Site): Fences were present, largely of post and wire/rail, with the addition of several active electric fences in 2024. Fences provided no ecological interest.
- 3.2.10 Wall (on and off Site): Along a section of the true left bank, below the weir, an area of reinforced wall/rocks with a bramble fringe was present.
- 3.2.11 Bare ground (off Site): Although not within the Site, a small area of bare ground was noted adjacent to the A396, in 2020 and 2024. Additional areas of bare ground were noted adjacent to the Site at the true-right bank, in 2024.
- 3.2.12 Other habitat – weir (on Site): The weir itself was present centrally within the Site, likely of concrete construction.
- 3.2.13 Other habitat – eel pass (on Site): In 2024, an existing eel pass was present on the weir, visible from the true right bank.



### **3.3 Protected Species Habitat Assessment**

- 3.3.1 Badgers: The Site and surrounding habitats (where possible) were searched for signs of badgers, although none were found during either visit. However, a single record of a badger was provided in close proximity to the Site by DBRC in 2003.
- 3.3.2 Bats (habitat): The Site and surrounding habitats were assessed for their suitability to support bats following methodology described in Collins (2023) and also using professional judgement. The River Exe, alongside adjacent areas of scattered trees, hedgerow and scrub, had connectivity to the wider landscape and were considered to provide potential for foraging and commuting bats in both 2020 and 2024. In addition, a total of 15 records of bats were provided by DBRC.
- 3.3.3 Bats (roost excluding trees): The trees were assessed separately for their bat roosting potential (see Section 3.4). No buildings/structures suitable for roosting bats were present within the zone of impact.
- 3.3.4 Breeding birds: Areas of scattered trees, hedge and scrub provided suitable breeding bird habitat. In 2024, evidence of historical breeding birds was noted within the scattered trees on Site, along the true right bank. Limited potential for breeding/nesting kingfisher was recorded at the true right or left banks, with no records of this species provided by DBRC.
- 3.3.5 Crayfish (Atlantic/white-clawed) and freshwater pearl mussel: Although an assessment of the aquatic ecosystem was outside the remit of this report, visually the bankside vegetation at the true left bank provided some potential for these species. However, no freshwater pearl mussel or white-clawed crayfish records were received from the DBRC, although it is appreciated this does not constitute absence.
- 3.3.6 Dormice: No suitable dormouse habitat occurred within the Site, although suitable dormouse habitat was noted in the adjacent scattered trees and hedge beyond the true left bank, in both 2020 and 2024. Only a single record of dormice was provided by DBRC within the desk study area (more than 400 m away from the Site).
- 3.3.7 Bony fish (Atlantic salmon, eel and sea/brown trout): Although an assessment of the aquatic ecosystem for bony fish was outside the remit of this report, suitable habitat occurred within the River Exe and associated eel pass.
- 3.3.8 Great crested newts: In both 2020 and 2024, no ponds were noted in close proximity to the Site boundaries, and the fast-flowing water within the Site was considered unsuitable for this species. Terrestrial habitat surrounding the Site provided potential for this species,

although no records of great crested newts were provided by DBRC within the desk study area.

3.3.9 Hedgehogs: The Site and surrounding habitats (where possible) were searched for signs of hedgehogs in 2024, although none were found. According to Hedgehog Street, a record of a live hedgehog was provided approximately 530 m south-east of the Site.

3.3.10 Invertebrates (terrestrial): While suitable terrestrial habitats were present within/adjacent to the Site, which could potentially support a varied assemblage of invertebrates, these were likely to be common and widespread species, as noted from the DBRC 1 km data search results.

3.3.11 Otters: No evidence of otter (spraints/holt/lie up or prints) was recorded within the Site or surrounding habitat in both 2020 or 2024. However, potential habitat was present, within the main water channel and adjacent riparian habitats at the true right and left banks. In addition, reinforced walls at the true left bank, below the weir, provided elevated sprainting locations. Only two records were provided by DBRC within the desk study area, one of which was in close proximity to the Site.

3.3.12 Reptiles: No suitable reptile habitat occurred within the Site in either 2020 or 2024, with the fast-flowing water unsuitable for reptiles. Grass areas were not considered suitably diverse, and lacked structure, to support a viable reptile population. In addition, only one record of reptiles was provided by DRBC within the desk study area, more than 500 m away in 2009.

3.3.13 Water voles: No evidence of water vole was noted, although potential habitat was present in vegetated bank areas, in both 2020 and 2024. In addition, no records of water voles were provided by DBRC within the desk study area.

### **3.4 Ground Level Tree Assessment**

3.4.1 Trees within the Site were visually assessed for their potential to support bat roosts. None of the trees within the Site provided any suitable bat roosting features. Although outside the Site and unlikely to be impacted by the proposed works, a mature ash with evidence of extensive ash die-back (T1) was noted on the true right bank. Should this tree be impacted, a detailed assessment will be required to establish if PRFs are present.

## **4 Evaluation and Recommendations**

### **4.1 Summary**

4.1.1 The current proposals for the Site include the construction of a fish pass, with associated, small scale engineering works. In order to evaluate impacts on biodiversity and protected species that may be present within or adjacent to the Site and the need or otherwise for further Stage 2 surveys, the location, the proposed development and likely level of works have been reviewed (where possible) against current standing advice and legislation. In addition, professional judgment has also been used.

### **4.2 Biological Desk Study**

4.2.1 The Site was within the impact risk zones of several SSSI and within 10 km of a SAC. These designated sites were classified for their habitats, geology and associated flora and fauna and any development in close proximity to these sites may have a detrimental impact on their ecological functionalities. This may result from the development activities themselves, or increased visitors and subsequent pressure on ecological resources of species linked to the designated sites.

4.2.2 The Local Planning Authority (LPA) or '*competent authority*' will need to review the proposed development against each citation and/or impact risk zone criteria to ascertain whether the proposed development is likely to have a significant effect on these designations. The LPA will be required to consider the development alone, and also in conjunction with other proposals or local plans. In determining impacts on these designations, the location, nature of the proposal and plans for the Site will all be assessed. If the proposed development was considered likely to have significant impact on a SAC, the LPA/competent authority will be required to conduct a formal assessment of the ecological implications of the proposed works. Generally termed a Habitat Regulations Assessment (HRA), the proposed works may require a formal screening to the LPA for any likely significant effects (alone or in combination with other projects).

4.2.3 Natural England suggests, '*Where these effects cannot be excluded, assessing them in more detail through an appropriate assessment (AA) is required to ascertain whether an adverse effect on the integrity of the site can be ruled out. Where such an adverse effect on the site cannot be ruled out, and no alternative solutions can be identified, then the project can only then proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured*' (Natural England).

4.2.4 When evaluating impacts from the level of works proposed, consideration to the actual area of impact should be measured, which in this case was relatively small. The proposed works were considered unlikely to impact designated sites, or species linked to these designated

sites or their ecological functionalities, however, it will be for the LPA to determine this against the aforementioned criteria.

#### **4.3 Phase 1 Habitat Survey**

4.3.1 The dominant habitats within the Site were the weir, with existing eel pass, and running water (River Exe). Other habitats within the Site included scattered broad-leaved trees, improved grassland, fence and wall. At the time of the surveys, no rare or nationally scarce botanical species were identified.

4.3.2 Based on the zone of impacts of the development being restricted to a relatively small working footprint, no additional Stage 2 habitat surveys were considered necessary.

4.3.3 All the habitats on Site qualified as either '*Local*', '*Site*' or '*Negligible*' ecological importance. Without mitigation, impacts to habitats on Site during the proposed works would therefore be considered to have (at worst) short-term, adverse effect, at the '*Local*' level. Mitigation/recommendations were proposed in Section 5, largely with regard to pollution incidents and lighting pollution during construction.

4.3.4 All trees within the adjacent scattered broad-leaved trees on the true left bank were proposed to be retained, with the hedge and tree line unaffected by the proposed development. Within the Site, the area of scattered trees near the weir crest on the true right bank will be thinned, although with canopy retained to provide shading and cover. A single willow will be removed to facilitate the new fish pass outlet. However, accidental damage could occur during construction such as root compaction, particularly from vehicular access, removal of materials and digging activities, as well as from contaminant run-off. Without mitigation, the impact would lead to an adverse effect in the medium-term, at the '*Site*' level for the scattered broad-leaved trees. Therefore, suitable precautionary measures were proposed in Section 5.

4.3.5 In addition, without mitigation, the dust created from the proposed works and removal of materials, may be deposited on adjacent trees or vegetation, which would lead to an adverse, short-term effect at the '*Site*' level. Therefore, suitable precautionary measures were proposed in Section 5.

#### **4.4 Protected Species**

4.4.1 The habitats and features within the Site were assessed for their potential to support protected species with the following evaluation.

- 4.4.2 **Badgers:** In England, badgers are listed under Appendix III of the Bern Convention, and protected under the Protection of Badgers Act 1992, which makes it an offence to intentionally kill, injure or capture a badger, damage, destroy or block access to their setts, disturb badgers when occupying their sett, as well as treat them cruelly, deliberately send or intentionally allow a dog into a sett, and bait or dig for them. At the time of the survey no evidence of badgers was found within the Site with limited potential for this species. Therefore, based on current proposals, no further Stage 2 badger surveys were considered necessary at the present time, however, suitable precautionary measures were proposed in Section 5.
- 4.4.3 **Bats:** In England, all bat species are fully protected and listed under Schedule 2 of The Conservation of Habitats and Species Regulations (as amended) 2017 amended by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019, Schedule 5 of the WCA (as amended) 1981, and listed under Section 41 (S41) of the NERC Act (2006) as well as included in the CRoW Act (2000). All UK bat species are also listed under Appendix II of the Bern Convention (with the exception of common pipistrelle, which is on Appendix III) and Appendix II of the Bonn Convention. In addition, greater and lesser horseshoes, Bechstein's, noctule, soprano pipistrelle, brown long-eared and barbastelle are also listed as UKBAP.
- 4.4.4 The protection afforded to bats is such that the animals and their roosts (used for rest or shelter) are legally protected. It is a criminal offence to deliberately take, injure, or kill a bat, intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats, damage or destroy a place used by bats for breeding or resting (even if bats are not present), possess or advertise/sell/exchange a bat of a species found in the wild (dead or alive), whole or any part of a bat, as well as intentionally or recklessly obstruct access to a bat roost. Important populations of greater and lesser horseshoes, Bechstein's and barbastelle require the designation of SAC.
- 4.4.5 Therefore, unlicensed works that may cause disturbance, killing, injury or blocking access to a place of rest and shelter has the potential to cause an offence. Following the withdrawal of Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation, the NPPF was published as its replacement in 2012. Circular ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System, was a guidance document that accompanied PPS9, and is still valid in its interpretation by local planning authorities on the impact a development may have on protected species. Circular 06/2005 states that the presence of a protected species is a *'material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'* (ODPM

06/2005). Furthermore, habitats within the Site were assessed for their potential to support foraging and commuting bats and whether the proposed works could impact bats.

*Bat – Habitat*

4.4.6 While the habitats within and adjacent to the Site were considered to provide suitable conditions for foraging bats and their flightpaths, with records from DBRC noted within the desk study area, the proposed development and general works were small. Importantly, no significant changes to the connectivity of the habitats in the wider landscape were likely, with no bat roosting opportunities noted within the Site. Therefore, based on the information gathered during the phase 1 habitat survey and protected species assessment, no further Stage 2 bat activity surveys (manual or automated) were required, although recommendations for preventing impacts associated with lighting during the works were outlined in Section 5.

*Bat Roost – Trees*

4.4.7 None of the trees within the Site provided potential for roosting bats. Although outside the Site, the mature ash (T1) noted on the true right bank had evidence of extensive ash die-back. Based on the information provided, T1 was unlikely to be impacted by the proposed works and therefore, no further Stage 2 aerial inspection and/or bat surveys were required. However, should proposals be altered, and T1 likely to be impacted, a further assessment would be required to establish the presence of PRF, as highlighted in Section 5.

4.4.8 Breeding birds: Under Section 1 of the WCA (as amended) 1981, wild birds (with exceptions) are protected from being killed, injured or captured, while their nests and eggs are protected from being damaged, destroyed or taken while in use. At the time of the survey, breeding bird habitat within the Site was restricted to the area of scattered broad-leaved trees, below the weir at the true right bank, with an old bird nest recorded within one of the trees. Suitable breeding bird habitat was also recorded off Site, in scattered trees, scrub and hedges. Both side of the banks immediately above and below the weir, provided limited potential for breeding/nesting kingfisher due to reinforced rock banks (true left) or very low banks which are inundated (true right). Although no further Stage 2 breeding bird surveys (for example walked transects) were considered necessary in this instance, suitable timing restrictions and recommendations were provided in Section 5.

4.4.9 Crayfish (Atlantic/white-clawed) and freshwater pearl mussels: In England, white-clawed (Atlantic) crayfish are protected under Schedule 5 of the WCA (as amended) 1981. They are also listed under S41 of the NERC Act (2006) and Appendix III of the Bern Convention. The species is also listed as UKBAP. The protection afforded to white-clawed (Atlantic) crayfish makes it an offence to take them from the wild, offer for sale, hold or transport for sale

(either dead or alive, whole or in part) as well as publish or advertise as being for sale. In addition, important population of this species require the designation of SAC.

4.4.10 In England, freshwater pearl mussels are protected under Schedule 5 of the WCA (as amended) 1981. They are also listed under S41 of the NERC Act (2006). The level of protection for freshwater pearl mussel makes it a criminal offence to intentionally kill or injure them, possess or control them (live or dead), intentionally or recklessly damage or destroy any structure or places used for shelter or protection, with animals protected from intentional or reckless disturbance while occupying a structure or place used for shelter or protection. In addition, it is an offence to intentionally or recklessly obstruct access to any structure of place used by freshwater pearl mussel for shelter or protection, with important populations of this species requiring the designation of SAC.

4.4.11 Although an assessment of the aquatic ecosystem was outside the remit of this report, the true left bankside vegetation provided some potential for these species. Although no records of these species were provided within the DBRC desk study area, absence of records does not necessarily mean absence of a species. Freshwater pearl mussels are under recorded in the south-west, although with a known population on the Rivers Torridge and Taw. However, based on the current population status/distribution in the south-west, the potential for this species being present within the Site at Bolham Weir was considered negligible. With regard to white-clawed crayfish, isolated populations of this species have been recorded on the Rivers Creedy (Creedy system) and Culm, and although historical records of white-clawed crayfish are known from the River Exe, the potential for this species being present within the Site was also considered negligible based on the current known population status/distribution within Devon. Consequently, no further Stage 2 surveys were proposed for these species.

4.4.12 Dormice: In England, dormice are fully protected under Schedule 2 of The Conservation of Habitats and Species Regulations (as amended) 2017 amended by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019, Schedule 5 of the WCA (as amended) 1981, and listed under S41 of the NERC Act (2006) and CRoW Act (2000). In addition, dormice are also listed as UKBAP species.

4.4.13 The protection afforded to dormice is such that the animals and the places they use for rest or shelter are legally protected. It is a criminal offence to deliberately or intentionally take, injure, or kill a dormouse, damage or destroy a place used by dormice for breeding or resting, deliberately or recklessly disturb a dormouse while in its structure or place of shelter/protection, block access to structures or places of shelter/protection, possess or sell, control or transport a dormouse (dead or alive, whole or in part).

- 4.4.14 The areas of broad-leaved scattered trees and intact species-poor hedge on the true left bank and outside the Site provided suitable habitat with connectivity to the wider landscape. However, based on the surveyor's experience<sup>4</sup> in habitat assessments for dormice, the habitats within the Site provided no potential for this species. In addition, no impacts to the boundary features will occur from the works proposed. It was therefore considered that a Stage 2 presence/likely absence dormouse survey following methodology proposed by Natural England (Bright *et al.*, 2006) was not necessary (or practical) in this instance. In addition, only one dormouse record was provided by DBRC within the desk study area. It should be noted that the surrounding habitat is regularly inundated during flooding events, reducing its suitability.
- 4.4.15 Fish (bony: Atlantic salmon, eel and sea/brown trout): In the UK, Atlantic salmon (freshwater only) are protected (may not be captured or killed in certain ways) under Schedule 4 of The Conservation of Habitats and Species Regulations (as amended) 2017 amended by the Conservation of Habitat and Species (Amendment) (EU exit) Regulations 2019. In addition, they are also listed under Appendix III of the Bern Convention (whilst in freshwater), listed under S41 of the NERC Act (2006), included within the Salmon and Freshwater Fisheries Act 1975 and a UKBAP priority species for England, Wales, Scotland and Northern Ireland. The protection afforded to Atlantic salmon (freshwater only) makes it an offence to capture or kill them via any means capable of causing the local disappearance of, or serious disturbance to, a population. An important population of this species require the designation of SAC. In December 2023, the International Union for Conservation of Nature (ICUN) recently reclassified Atlantic salmon in Great Britain (excluding Leven subpopulation and English chalkstream) from '*Least Concern*' to '*Endangered*' as a result of significant declines in population since 2006.
- 4.4.16 Eel are included within The Eels (England and Wales) Regulations 2009, listed under S41 of the NERC Act (2006) and a UKBAP priority species for England, Wales, Scotland and Northern Ireland. In Great Britain, the ICUN classify eel as critically endangered.
- 4.4.17 Sea/brown trout are listed under S41 of the NERC Act (2006) and also a UKBAP priority species for England, Wales, Scotland and Northern Ireland.
- 4.4.18 Although an assessment of the aquatic ecosystem for bony fish was outside the remit of this report, further details are outlined in Section 5 in relation to method statements relating to impacts to fish.

<sup>4</sup> Mr H. Colmer BSc (Hons) Dip MCIEEM FLS – Dormouse licence.



- 4.4.19 Great crested newts: In England, great crested newts are fully protected under Schedule 2 of The Conservation of Habitats and Species Regulations (as amended) 2017 amended by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019, Schedule 5 of the WCA (as amended) 1981, listed under S41 of the NERC Act (2006), and the CRoW Act (2000). In addition, great crested newts are also listed under Appendix II of the Bern Convention and as a UKBAP species, with important populations of this species requiring the designation of SAC.
- 4.4.20 The protection afforded to great crested newt is such that the animals and the places they use for rest or shelter are legally protected. It is a criminal offence to deliberately or intentionally take, injure, disturb or kill a great crested newt, damage or destroy their breeding or resting places, deliberately or recklessly block access to structures or places of shelter/protection, possess or sell, control or transport a great crested newt (dead or alive, whole or in part) or take their eggs.
- 4.4.21 No ponds were noted within, or in close proximity to the proposed works, with no records for this species provided by DBRC within the desk study area. In addition, the fast-flowing water within the Site was considered unsuitable for this species. The Site was therefore considered to provide negligible potential for this species and no further Stage 2 great crested newt surveys were considered necessary.
- 4.4.22 Hedgehogs: In England, hedgehogs are listed under Appendix III of the Bern Convention, Schedule 6 of the WCA (as amended) 1981 and Section 41 of NERC Act (2006). Based on the habitat assessment for this species, their presence was considered unlikely with no further Stage 2 surveys considered necessary.
- 4.4.23 Invertebrates (terrestrial): The habitats within and adjacent to the Site were likely to support a range of common and widespread invertebrate species, however, it was considered that impacts were likely to be low and no further Stage 2 invertebrate surveys were considered necessary. The regularly grazed and managed grassland also reduced the suitability for a diverse assemblage of terrestrial invertebrates.
- 4.4.24 Otters: In England, otters are fully protected under Schedule 2 of The Conservation of Habitats and Species Regulations (as amended) 2017 amended by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019, Schedule 5 of the WCA (as amended) 1981, and listed under S41 of the NERC Act (2006) as well as included in the CRoW Act (2000). In addition, otters are also listed under Appendix II of the Bern Convention, as a UKBAP and important population of this species require the designation of SAC.

- 4.4.25 The protection afforded to otters is such that the animals and the places they use for rest or shelter are legally protected. It is a criminal offence to deliberately or intentionally take, injure, disturb or kill otters, damage or destroy their breeding or resting places, deliberately or recklessly block access to structures or places of shelter/protection, possess or sell, control or transport an otter (dead or alive, whole or in part).
- 4.4.26 At the time of the survey, no confirmed otter holt or direct evidence of otter presence were recorded within the Site, with limited potential for holt creation. However, potential within the main water channel and adjacent riparian habitats at the true right and left banks were noted. In addition, reinforced walls at the true left bank, below the weir, provided elevated sprainting locations with two records of otters provided by DBRC. Furthermore, this species is regularly recorded within the River Exe. Dog otters have a large home range (30 km or more) and therefore based on the potential for this species and records within the desk study, it was considered likely that otters would occasional forage/commute through the Site, or utilise features near the zone of impact. Therefore, although no further Stage 2 otter surveys were required, precautionary measures must be taken during construction to avoid any potential impacts to otters (and other mammals), as highlighted in Section 5.
- 4.4.27 Reptiles: In England, the four widespread species of reptiles (common lizard, slow-worm, adder and grass snakes) are listed under S41 of the NERC Act (2006) and protected under Schedule 5 of the WCA (as amended) 1981. In addition, these four species are also listed as UKBAP.
- 4.4.28 The protection afforded to slow-worm, common lizard, adder and grass snake is such that the animals are protected from intentional killing or injuring, as well as being sold, offered for sale or held or transported for sale (dead or alive, whole or in part) as well as protected from being published or advertised as being for sale.
- 4.4.29 No suitable reptile habitat was present within the Site, with the fast-flowing water and improved grazed and managed grassland, both considered unsuitable. Therefore no further Stage 2 presence/likely absence reptile surveys were considered necessary.
- 4.4.30 Water voles: In England, water voles are protected and listed under Schedule 5 of The WCA (as amended) 1981 and listed under S41 the NERC Act (2006). In addition, water voles are also listed as UKBAP.
- 4.4.31 The protection afforded to water voles is such that the animals and the places they use for rest or shelter are legally protected. It is a criminal offence to intentionally take, injure or kill water voles, intentionally or recklessly damage, destroy or block access to their breeding or

resting places, intentionally or recklessly disturb them in a place of shelter or protection, possess or sell, control or transport a water vole not bred in captivity (dead or alive, whole or in part).

4.4.32 No evidence of water vole was noted within the Site, with no records provided by DBRC within the desk study area. Although this species is at low population densities within Devon, some suitable habitat was present in adjacent habitat, however, the rocks immediately below the weir (and the weir itself) within the Site provided no potential burrowing opportunities. Therefore, although no further Stage 2 water vole surveys were considered necessary, precautionary measures must be taken during construction to avoid any potential impacts to this species (and other mammals), as highlighted in Section 5.

#### 4.5 Evaluation/Assessment of Ecological Features

4.5.1 The importance of all ecological features including designated sites, habitats on and off Site, as well as protected or noteworthy species were summarised in Table 1.

Table 1: Ecological features including designated sites, habitats on and off Site, as well as protected or noteworthy species and their associated ecological importance.

Ecological Features	Ecological Importance	Explanation
<i>Designated Sites</i>		
<i>SAC</i>	International	As per designation status
<i>SSSI</i>	National	As per designation status
<i>LNR</i>	Local	As per designation status
<i>Other Locally important Sites</i>		
<i>CWS</i>	County	As per designation status
<i>Habitats on Site</i>		
<i>Scattered broad-leaved trees</i>	Site	Common and widespread habitat of ecological interest at the site level
<i>Improved grassland</i>	Negligible	Common and widespread habitat of low ecological interest
<i>Running water</i>	Local	River Exe provides connecting habitat of ecological interest at the local level
<i>Fence</i>	Negligible	No ecological interest
<i>Wall</i>	Site	Sprainting locations for otters
<i>Other habitat – Weir</i>	Negligible	No ecological interest
<i>Other habitat – Eel pass</i>	Local	Connecting habitat of ecological interest at the local level for eels
<i>Habitats off Site</i>		
<i>Scattered scrub</i>	Site	Common and widespread habitat of limited ecological interest at the site level
<i>Scattered broad-leaved trees</i>	Site	Common and widespread habitat of ecological interest at the site level
<i>Semi-improved species poor grassland</i>	Site	Common and widespread habitat of limited ecological interest
<i>Improved grassland</i>	Negligible	Common and widespread habitat of low ecological interest
<i>Intact species poor hedge</i>	Site	Common and widespread habitat of ecological interest at the site level
<i>Fence</i>	Negligible	No ecological interest
<i>Wall</i>	Site	Sprainting locations for otters
<i>Bare ground</i>	Negligible	No ecological interest
<i>Protected and Noteworthy Species on Site</i>		
<i>Badger</i>	Negligible	No evidence of, or potential for, badger use

<b>Ecological Features</b>	<b>Ecological Importance</b>	<b>Explanation</b>
<i>Bats (Foraging/Commuting)</i>	Local	Surrounding vegetation and River Exe provided potential for foraging and commuting bats
<i>Bats (Roosting)</i>	Negligible	No potential within Site
<i>Birds</i>	Site	Suitable breeding bird habitat at broad-leaved trees – old nest noted
<i>Crayfish (Atlantic/white-clawed) and freshwater pearl mussels</i>	Negligible	The potential for this species being present within the Site was also considered negligible based on the current known population status/distribution within Devon
<i>Dormice</i>	Negligible	No suitable habitat within Site
<i>Fish (bony)</i>	Site	Atlantic salmon, eel and sea/brown trout utilising river and eel pass
<i>Great crested newt</i>	Negligible	No ponds within the Site, and fast flowing water considered unsuitable for this species
<i>Hedgehog</i>	Negligible	Hedgehogs unlikely to use Site
<i>Invertebrates (terrestrial)</i>	Site	Potential for common and widespread species
<i>Otter</i>	Site	River suitable for hunting or commuting otter although no evidence of holt on Site
<i>Reptiles</i>	Negligible	No potential within the Site
<i>Water vole</i>	Negligible	Limited potential within the Site

## 5 Ecological Mitigation, Compensation and Enhancements

### 5.1 Protected Species

- 5.1.1 The following measures were required to avoid any adverse impacts to protected species:
1. Bat (habitat): If external lighting was required during construction, this will be kept to a minimum and consist of LED luminaries, ideally of a warm white spectrum (< 2,700 Kelvin), upward light ratio negligible or of 0 % and with good optical control, and with any external security lighting to be set on motion-sensors and short (1 – 2 minutes) timers (Institution of Lighting Professionals and Bat Conservation Trust, 2023). No lighting onto the River Exe and/or the adjacent habitats or any permanent lighting permitted post construction. It was noted that no long-term lighting was proposed, with no increase compared to that already existing, therefore, no post construction monitoring was necessary;
  2. Bats (roost): None of the trees within the Site provided potential for roosting bats. Although outside the Site and unlikely to be impacted by the proposed works, the mature ash (T1) had evidence of extensive ash die-back. Should this tree be impacted, a further assessment would be required to establish if PRFs are present;
  3. Birds: Should any suitable breeding bird habitat within or in close proximity to the Site require removal/thinning to facilitate works during the bird breeding season of 1<sup>st</sup> March – 31<sup>st</sup> August inclusive, a suitably qualified individual/ecologist would need to undertake an inspection for breeding birds within 24 hours prior to any clearance. If breeding birds were identified, these must remain in place until breeding has ceased and dependent young have fledged, with a suitable exclusion zone implemented where necessary. The advising ecologist will periodically monitor any occupied nest, until young have fledged. No inspection or supervised clearance would be required for removal of breeding birds habitat between 1<sup>st</sup> September – 28<sup>th</sup> February (or 29<sup>th</sup> in any leap year);
  4. Fish: Although an assessment of bony fish was outside the remit of this report, it is likely to be covered in detail by any supporting documentation by WRT. For example, a method statement must be provided by the applicant/contractor, to identify and highlight any timing restrictions/requirement regarding fish, their environmental provisions and containment measures essential to the requirements of the project;
  5. Otters and water vole: Prior to any development, a pre-construction otter and water vole presence/likely absence survey must be conducted by a suitably qualified ecologist. Depending on the level of otter or water vole evidence found within the Site (if any), construction activity may need to be postponed and where necessary, further surveys and/or licence applications may be required; and
  6. Terrestrial mammals: During construction, any open dug trenches must be covered overnight to prevent any terrestrial mammals (such as badgers, foxes or hedgehogs) from being trapped. If this was not possible, suitable mammal ladders, in the form of simple wooden planks with a maximum gradient of 1:2 must be provided. In addition,

any piping with the potential to entrap terrestrial mammals will be capped at the end of each working day. The contractor shall implement an auditing system, documenting mammal ladder installation or the capping of pipes. Details should be made available to an ecologist on request, although monitoring during or post construction was not proposed.

## **5.2 Site Wide Mitigation Measures**

5.2.1 In order to avoid any adverse impacts to habitats on and in the vicinity of the Site, the following ecological avoidance measures/mitigation were made:

1. Contractors must work in accordance with the pollution prevention for businesses guidance, Department for Environment, Food and Rural Affairs (DEFRA) and Environment Agency (EA) (2016 – updated 2023) and follow guidelines for preventing adverse dust levels, minimising run off and using bunded storage, for example when refuelling vehicles and storing oil and fuel. Contractors shall be made aware of the potential that pollution incidents may occur, with spills kits to remain on Site for the duration of the development and where necessary, toolbox talks to be given. It is the responsibility of the applicant and their contractors to supply appropriate information and monitoring for the LPA to review;
2. In order to prevent any ground works exposing roots of retained trees/hedgerows, a root protection zone will be implemented in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction (BSI, 2012). The root protection zone(s) will be monitored throughout the construction phase and with appropriate signage in place. In addition, any trees that require pruning should be carried out following good silvicultural practices, following consultation with a qualified arboriculturist where appropriate and only where the lack of any Tree Preservation Order has been confirmed;
3. Due to the evidence of ash die-back, an exclusion zone to be implemented in the surrounding area of T1, as a precautionary measure to prevent accidental injury as a consequence of falling dead branches, and the spread of fungal spores via contaminated footwear;
4. Construction access to the weir and true left bank was proposed via an existing track off the A396 and over existing concrete bridge. Construction access to the weir and true right bank was proposed via existing access tracks (either through Marsh Farm or along farm tracks), and across a field of improved grassland. The temporary compound was proposed immediately north of the Site, also on the area of improved grassland. Therefore, ground protection mats to be installed by contractors to protect ground flora and prevent ground compaction; and
5. Construction best practice measures shall be detailed in a construction environmental management plan (CEMP).

### 5.3 Ecological Enhancements

5.3.1 In accordance with the NPPF (revised 2023), new habitats or features of biodiversity gain must be created within a sustainable development, or by managing existing features for ecological and biodiversity gain. Although this may be restricted with the small-scale development proposal, the following enhancements were proposed:

1. Bird boxes: As an additional ecological enhancement, a total of two bird boxes to be fitted on retained boundary trees. Bird boxes to comprise either open fronted and/or traditional hole entrance boxes and can either be supplied ready-made, or created from off-cuts from the proposed development (where possible);
2. Fish: The installation of a fish pass at the weir will be a significant ecological enhancement for fish distribution within the river and associated catchment. It has been confirmed that the Bolham fish pass improvements was part of the Strategic Exe Weirs project which, *'aims to stop the declining trajectory of freshwater fish populations: particularly Atlantic salmon with 70% reduced numbers nationally in the last 25 years. The project specifically targets obligate migratory fish by improving fish passage in both upstream and downstream directions and preventing divergence from the river. The planned work aims to improve migration timings and reduce delays by protecting free flowing rivers and restoring connectivity'*. (Pers. comm. Mr A. Dowding, WRT to Colmer Ecology, 27<sup>th</sup> February 2024); and
3. Planting: If post development planting/landscaping was proposed, this shall be of native species and locally sourced, aiming to incorporate a varied vegetation structure. An ecologist should review any planting proposal in order to suggest species of known ecological gain. If any trees were removed, these will be replaced on a like-for-like (i.e. same species) basis within, or adjacent to the Site.

### 5.4 Residual effects

5.4.1 The residual effects following implementation of mitigation and compensation were summarised in Table 2 for each ecological feature following CIEEM (2018).

Table 2: Summary of residual effects

Ecological Features	Impact	Level	Mitigation Measures	Compensation/Enhancement Measures	Residual Effects	
<i>Designated Sites</i>						
SAC	LPA to confirm if HRA is required	International	-	-	-	
SSSI	No impact	National	-	-	-	
LN/R	No impact	Local	-	-	-	
<i>Other Locally Important Sites</i>						
CWS	No impact	County	-	-	-	
<i>Habitats on Site (Based on JNCC Phase 1 Habitat Classification)</i>						
<i>Scattered broad-leaved trees</i>	Thinning only of trees on true right bank by weir – removal of one willow to facilitate the new fish pass outlet	Site	Tree root protection zone to be implemented in accordance with BSS5837:2012 Trees In Relation to Design, Demolition and Construction (BSI, 2012).	Any trees removed to will be replaced on a like-for-like (i.e. same species) basis within or adjacent to the Site	Neutral	
<i>Improved grassland</i>	Partial removal for creation of Larinier fish pass	Negligible	Construction best practice measures via CEMP provided by contractor			
<i>Running water</i>	No impact	Local	Contractors to work in accordance with the pollution prevention for business guidance (DEFRA and EA, 2016 – updated 2023)	-	Neutral	
<i>Fence</i>	No impact	Negligible				
<i>Wall</i>	No impact	Site				
<i>Other habitat – Weir</i>	Improvement	Negligible	Construction best practice measures via CEMP provided by contractor	Fitting of smolt and silt notches, improvement of rip rap and proposed smolt screen	Positive	
<i>Other habitat – Eel pass</i>	Improvement	Local		Extension of existing eel pass with new eel pass alongside Larinier fish pass	Positive	
<i>Habitats off Site (Based on JNCC Phase 1 Habitat Classification)</i>						
<i>Scattered scrub</i>	No impact	Site	-	-	-	
<i>Scattered broad-leaved trees</i>	No impact	Site	Contractors to work in accordance with the pollution prevention for business guidance (DEFRA and EA, 2016 – updated 2023)	-	-	
			Exclusion zone (Heras fencing for example) around T1 (ash die-back)			



Ecological Features	Impact	Level	Mitigation Measures	Compensation/Enhancement Measures	Residual Effects
<i>Semi-improved species</i>	No impact	Site	-		
<i>Improved grassland</i>	Temporary use as access track and compound	Negligible	Contractors to work in accordance with the pollution prevention for business guidance (DEFRA and EA, 2016 – updated 2023)		
			Ground protection mats to be installed by contractors to protect ground flora and prevent ground compaction	-	-
			Construction best practice measures via CEMP provided by contractor		
<i>Intact species poor hedge</i>	No impact	Site			
<i>Fence</i>	No impact	Negligible			
<i>Wall</i>	No impact	Site			
<i>Bare ground</i>	No impact	Negligible			
<b>Protected and Noteworthy Species</b>					
<i>Badgers</i>	Potential to become entrapped in excavation/ piping during construction period	Negligible	Trenches to be covered at night or fitting suitable terrestrial mammal ladders, as well as capping pipes	-	Neutral
<i>Bats (Foraging/Communting)</i>	No impact	Local	No lighting onto adjacent habitats. If required during construction, must consist of LED luminaries, ideally of a warm white spectrum (< 2,700 Kelvin), upward light ratio negligible or of 0 % and with good optical control, with any external security lighting to be set on motion-sensors and short (1 – 2 minutes) timers	-	Neutral
<i>Bats (Roosting)</i>	No impact	Negligible	-	-	-

Ecological Features	Impact	Level	Mitigation Measures	Compensation/Enhancement Measures	Residual Effects
<i>Birds</i>	Thinning of tree and removal of willow	Site	Should any suitable breeding bird habitat require removal during the bird breeding season of 1 <sup>st</sup> March – 31 <sup>st</sup> August inclusive, a suitably qualified individual would need to undertake an inspection for breeding birds within 24 hours prior to any clearance	Proposed bird boxes on tree(s)	Neutral
<i>Crayfish (Atlantic/white-clawed) and freshwater pearl mussel</i>	No impact	Negligible	-	-	-
<i>Dormice</i>	No impact	Negligible	-	-	-
<i>Fish (bony)</i>	Impact to river, weir, and riverbed	Site	Method statement must be provided by the applicant/contractor outlining works and avoidance measures	Smolt screen, smolt notch on weir, removal and replacement of eel pass, removal of baulk fish pass, new fish pass and channel on true right bank, weir notch, and rip rap infill	Positive
<i>Great crested newts</i>	No impact	Negligible	-	-	-
<i>Hedgehogs</i>	Potential to become entrapped in excavation/ piling during construction period	Negligible	Trenches to be covered at night or fitting suitable terrestrial mammal ladders, as well as capping pipes	-	-
<i>Invertebrates (terrestrial)</i>	Removal of some habitat of low importance (improved grassland)	Site	-	-	Neutral
<i>Otters</i>	Potential to become entrapped in excavation/ piling during construction period - disturbance	Site	Prior to any development, a pre-construction otter presence/likely absence survey must be conducted by a suitably qualified ecologist  Trenches to be covered at night or fitting suitable terrestrial mammal ladders, as well as capping pipes	Habitat improvements for fish will also benefit otter	Positive
<i>Reptiles</i>	No impact	Negligible	-	-	-
<i>Water voles</i>	Potential to become entrapped in excavation/ piling during	Negligible	Prior to any development, a pre-construction water vole presence/likely absence survey must be conducted by a suitably qualified ecologist	-	Neutral

Ecological Features	Impact	Level	Mitigation Measures	Compensation/Enhancement Measures	Residual Effects
	construction period		Trenches to be covered at night or fitting suitable terrestrial mammal ladders, as well as capping pipes		

## **6 Conclusion**

- 6.1 An update EclA was carried out on the River Exe at Bolham Weir in Devon, to assess impacts from the proposed development. During the phase 1 habitat survey, no rare or nationally scarce botanical species were identified.
- 6.2 All habitat types have been identified and mapped, with the Site dominated by the weir, with existing eel pass and running water (River Exe) in both 2020 and 2024. Additional habitats within the Site included scattered broad-leaved trees, improved grassland, fence and wall. An assessment of site valuation and impact to habitats was undertaken with suitable mitigation and compensation measures suggested as required.
- 6.3 In the absence of mitigation measures, the proposed development was considered likely to have at worst, short-term, adverse effect at the *'Local'* level. However, by following the proposed mitigation and precautionary measures, the development was not considered to have any significant residual effect to important ecological features within or adjacent to the Site. Provided the proposed mitigation, compensation and enhancement measures are followed, the development was considered to be consistent to relevant conservation legislation, NPPF (revised 2023) and local policies. In addition, the proposed works will contribute to the long-term enhancement of the catchment for freshwater fish, especially Atlantic salmon, eel and sea/brown trout. No European protected species licences were required in this instance. The ecological mitigation as outlined must be followed and conditioned.
- 6.4 This report is valid for a period of 12 months from the date of the survey.

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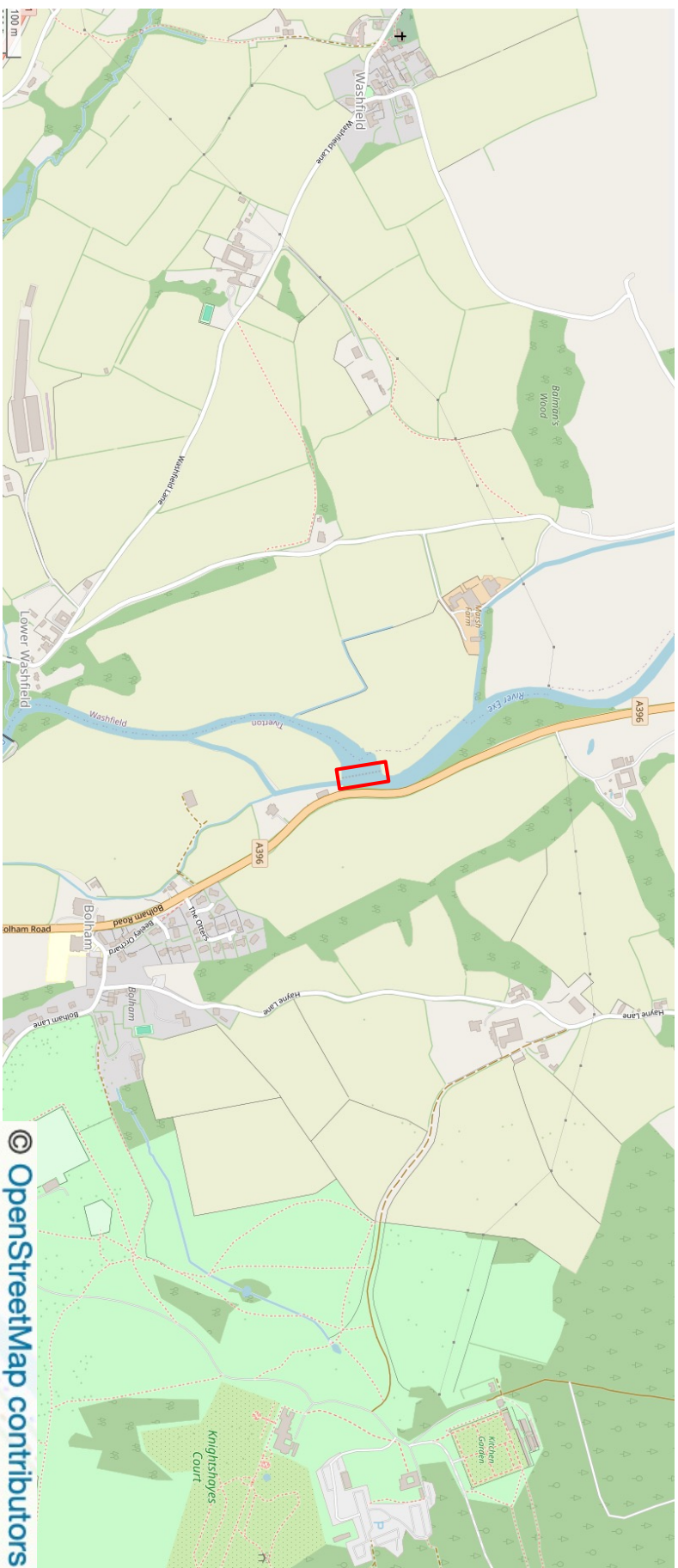
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<https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Swift Mapper. <https://www.swiftmapper.org.uk>

## Figures

Figure 1: Site location – provided by OpenStreetMap



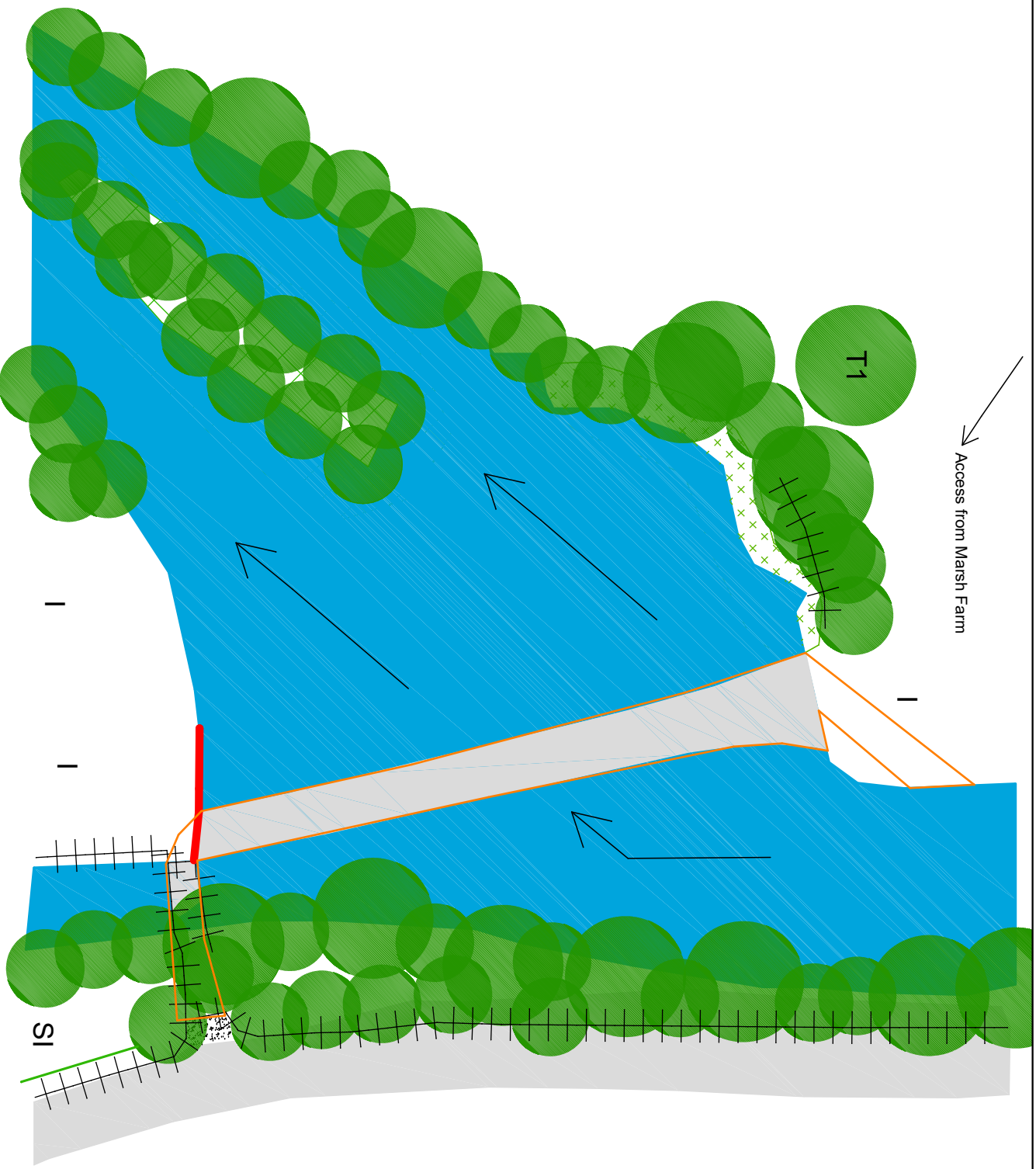
Site: NGR ST 02811 14075

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Map data from OpenStreetMap.





- Key**
- River Exe
  - Scattered trees
  - Bare ground
  - Weir and Road
  - Dense scrub
  - Scattered scrub
  - Fence
  - Intact species poor hedge
  - Site boundary
  - Wall
  - Target note

revision	description	date	drawn by

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**Project:** Boham Weir, River Exe  
**Title:** Habitat plan

<b>status</b>	FINAL	<b>drawing no.</b>	Figure 2
<b>scale</b>	A3	<b>date</b>	Feb 2024
<b>drawn by</b>	JH	<b>checked by</b>	JR
<b>date</b>	2024.02.08	<b>drawn by</b>	NAW CAD



Figure 3: Annotated photographs – original survey 2020 (photos taken 18/11/2020)

Existing access into Site looking west from A396



Looking back to access gate and A396 from the existing leaf bridge



View of weir and proposed location of fish pass – looking upstream



Downstream of weir, with adjacent rock and inundation on true left bank



Looking back upstream from true left bank scattered trees and bankside habitat



Additional view downstream from weir and taken from true left bank





Figure 4: Annotated photographs – update survey 2024 (photos taken 12/02/2024)

View of weir from true left bank – looking upstream



Heavily grazed improved grassland bordering true left bank



Scattered trees at true left bank – looking upstream



Downstream view of weir and scattered trees at true right bank, bordered by grassland



Existing eel pass and redundant fish pass at true right bank



Scattered trees at true right bank – just below weir and existing eel pass



## Appendices

## Appendix 1

Appendix 1 - List of Indictive Fauna and Flora Latin Names

Fauna

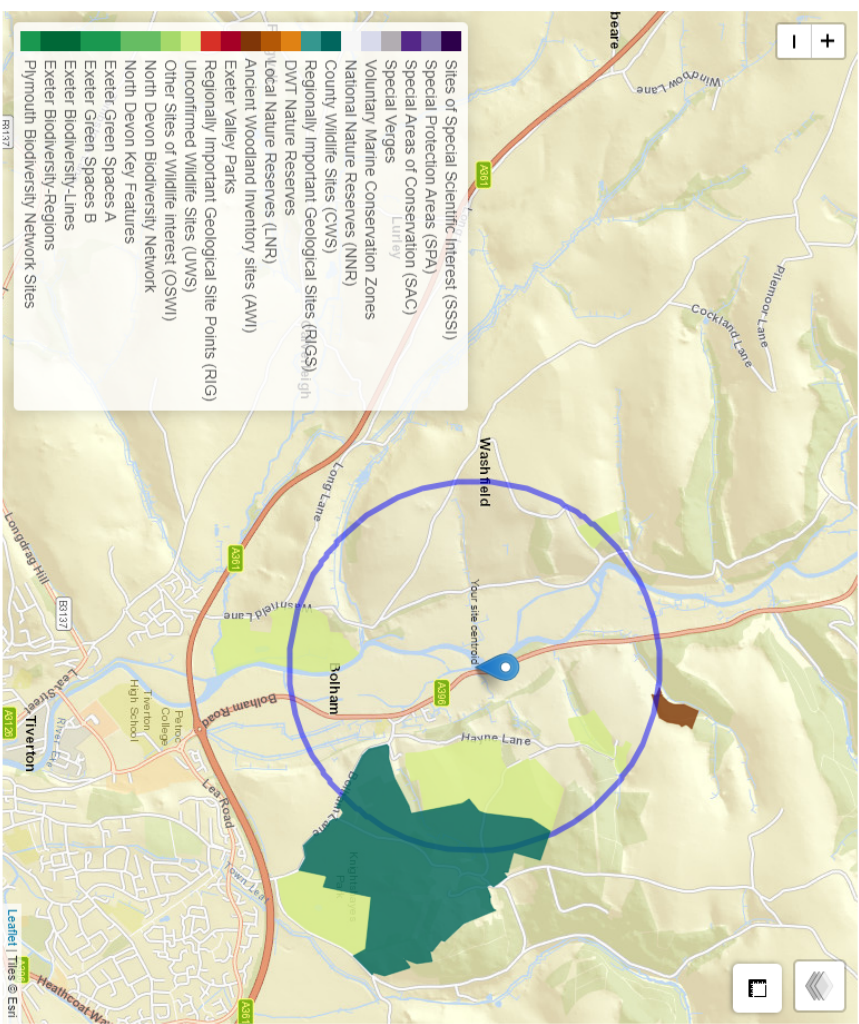
Adder	<i>Vipera berus</i>	Speckled wood	<i>Pararge aegeria</i>	Common harebell	<i>Campanula rotundifolia</i>
Badger	<i>Meles meles</i>	Starling	<i>Sturnus vulgaris</i>	Common marsh-bedstraw	<i>Galium palustre</i>
Bank vole	<i>Myodes glareolus</i>	Stoat	<i>Mustela erminea</i>	Common nettle	<i>Urtica dioica</i>
Barbastelle	<i>Barbastella barbastellus</i>	Water vole	<i>Arvicola amphibius</i>	Common sorrel	<i>Rumex acetosa</i>
Barn owl	<i>Tyto alba</i>	Whiskered	<i>Myotis mystacinus</i>	Common toadflax	<i>Linaria vulgaris</i>
Barn swallow	<i>Hirundo rustica</i>	Wood pigeon	<i>Columba palumbus</i>	Common violet	<i>Viola riviniana</i>
Bechstein	<i>Myotis bechsteini</i>			Cotoneaster	<i>Cotoneaster sp.</i>
Blue tit	<i>Cyanistes caeruleus</i>	<u>Flora</u>		Cottongrass	<i>Eriophorum angustifolium</i>
Brandt	<i>Myotis brandtii</i>	Agrimony	<i>Agrimonia sp.</i>	Cow parsley	<i>Anthriscus sylvestris</i>
Brown long-eared	<i>Plecotus auritus</i>	Alder	<i>Alnus glutinosa</i>	Cranesbill species	<i>Geranium</i>
Chil bunting	<i>Emberiza cirius</i>	Annual meadow-grass	<i>Poa annua</i>	Creeping bent	<i>Agrostis stolonifera</i>
Common frog	<i>Rana temporaria</i>	Apple	<i>Malus domestica</i>	Creeping buttercup	<i>Ranunculus repens</i>
Common kingfisher	<i>Alcedo atthis</i>	Ash	<i>Fraxinus excelsior</i>	Creeping cinquefoil	<i>Potentilla reptans</i>
Common lizard	<i>Zootoca vivipara</i>	Aspen	<i>Populus tremula</i>	Crested Dogstail	<i>Cynosurus cristatus</i>
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Bay laurel	<i>Laurel nobilis</i>	Cuckooflower	<i>Cardamine pratensis</i>
Common swift	<i>Apus apus</i>	Beech	<i>Fagus sylvatica</i>	Cypress species	<i>Cupressus sp.</i>
Common toad	<i>Bufo bufo</i>	Bell heather	<i>Erica cinerea</i>	Daffodil	<i>Narcissus sp.</i>
Daubenton	<i>Myotis daubentonii</i>	Bindweed	<i>Calystegia sepium</i>	Daisy	<i>Bellis perennis</i>
Dormouse	<i>Muscardinus avellanarius</i>	Bird's-foot-trefoil	<i>Lotus corniculatus</i>	Dandelion	<i>Taraxacum officinale agg.</i>
Eurasian beaver	<i>Castor fiber</i>	Blackthorn	<i>Prunus spinosa</i>	Devil's-bit scabious	<i>Succusa pratensis</i>
European eel	<i>Anguilla anguilla</i>	Bluebell	<i>Hyacinthoides non-scripta</i>	Dock species	<i>Rumex sp.</i>
European Hedgehog	<i>Erinaceus europaeus</i>	Bogbean	<i>Menyanthes trifoliata</i>	Dog rose	<i>Rosa canina</i>
Grass snake	<i>Natrix natrix</i>	Borage	<i>Borago officinalis</i>	Dog's mercury	<i>Mercurialis perennis</i>
Great crested newt	<i>Triturus cristatus</i>	Bracken	<i>Pteridium aquilinum</i>	Elder	<i>Sambucus nigra</i>
Greater horseshoe	<i>Rhinolophus ferrumequinum</i>	Bramble	<i>Rubus fruticosus sp. agg.</i>	Elm	<i>Ulmus minor var. vulgaris</i>
Grey long-eared	<i>Plecotu austriacus</i>	Bristly oxtongue	<i>Helminthotheca echioides</i>	False oat-grass	<i>Arrhenatherum elatius</i>
House sparrow	<i>Passer domesticus</i>	Bugle	<i>Ajuga reptans</i>	Field bindweed	<i>Convolvulus arvensis</i>
Leisler	<i>Nyctalus leisleri</i>	Buttercup	<i>Ranunculus sp.</i>	Field maple	<i>Acer campestre</i>
Lesser horseshoe	<i>Rhinolophus hipposideros</i>	Butterfly bush	<i>Buddleja davidii</i>	Fleabane	<i>Erigeron sp.</i>
Nathusius pipistrelle	<i>Pipistrellus nathusii</i>	Camomile	<i>Matricaria chamomilla</i>	Forget-me-not	<i>Myosotis scorpioides</i>
Natterer	<i>Myotis nattereri</i>	Canadian pondweed	<i>Elodea canadensis</i>	Foxglove	<i>Digitalis purpurea</i>
Noctule	<i>Nyctalus noctula</i>	Chickweed	<i>Stellaria media</i>	Fuchsia	<i>Fuchsia magellanica</i>
Otter	<i>Lutra lutra</i>	Cleavers	<i>Galium aparine</i>	Germander speedwell	<i>Veronica chamaedrys</i>
Palmate newt	<i>Triturus helveticus</i>	Clover species	<i>Trifolium</i>	Giant Hogweed	<i>Heracleum mantegazzianum</i>
Red admiral	<i>Vanessa atalanta</i>	Cob nut	<i>Corylus sp.</i>	Goose grass	<i>Galium aparine</i>
Roach	<i>Rutilus rutilus</i>	Cock's-foot	<i>Dactylis glomerata</i>	Gorse	<i>Ulex europaeus</i>
Roe deer	<i>Capreolus capreolus</i>	Comfrey	<i>Symphytum officinale</i>	Greater birds-foot trefoil	<i>Lotus pedunculatus</i>
Serotine	<i>Eptesinus serotinus</i>	Common bistort	<i>Persicaria bistorta</i>	Greater burdock	<i>Arctium lappa</i>
Slow worm	<i>Anguis fragilis</i>	Common chickweed	<i>Stellaria media</i>	Greater plantain	<i>Plantago major</i>
Smooth newt	<i>Triturus vulgaris</i>	Common figwort	<i>Scrophularia nodosa</i>	Ground ivy	<i>Glechoma hederacea</i>
Soprano pipistrelle	<i>Pipistrelly pygmaeus</i>			Guelder-rose	<i>Sambucus eblus</i>

Guilder rose	<i>Viburnum opulus</i>	Navelwort	<i>Umbilicus rupestris</i>	Spear thistle	<i>Cirsium vulgare</i>
Hairy brome	<i>Bromus ramosus</i>	New Zealand pigmy weed	<i>Crassula helmsii</i>	Spindle	<i>Euonymus europaeus</i>
Hart's tongue fern	<i>Asplenium scolopendrium</i>	Oxeye daisy	<i>Leucanthemum vulgare</i>	Stitchwort species	<i>Stellaria</i> sp.
Hawkbit	<i>Leontodon</i> sp.	Pedunculate oak	<i>Quercus robur</i>	Sumac	<i>Rhus</i> sp.
Hawthorn	<i>Crataegus monogyna</i>	Pendulous sedge	<i>Carex pendula</i>	Sycamore	<i>Acer pseudoplatanus</i>
Hazel	<i>Corylus avellana</i>	Perennial rye-grass	<i>Lolium perenne</i>	Teasel species	<i>Dipsacus</i> sp.
Hemlock water-dropwort	<i>Oenanthe crocata</i>	Periwinkle	<i>Vinca</i> sp.	Thistle species	<i>Cirsium</i> sp.
Hemp-agrimony	<i>Eupatorium cannabinum</i>	Pimpemel species	<i>Lysimachia</i> sp.	Three-cornered leek	<i>Allium triquetrum</i>
Herb-robert	<i>Geranium robertianum</i>	Pine	<i>Pinus</i> sp.	Timothy	<i>Phleum pratense</i>
Himalayan balsam	<i>Impatiens glandulifera</i>	Pineapple weed	<i>Matricaria discoidea</i>	Tormentil	<i>Potentilla erecta</i>
Hogweed	<i>Heracleum sphondylium</i>	Pond weed	<i>Potamogeton</i>	Tutsan	<i>Hypericum androsaemum</i>
Holly	<i>Ilex aquifolium</i>	Poplar species	<i>Populus</i> sp.	Vetch species	<i>Vicia</i> sp.
Holm oak	<i>Quercus ilex</i>	Poppy	<i>Papaver</i> sp.	Walnut	<i>Juglans regia</i>
Honesty	<i>Lunaria annua</i>	Primose	<i>Primula vulgaris</i>	Water crowfoot	<i>Ranunculus aquatilis</i>
Honeysuckle	<i>Lonicera periclymenum</i>	Privet	<i>Ligustrum</i> sp.	Water forget-me-not	<i>Myosotis scorpiodes</i>
Hornbeam	<i>Carpinus betulus</i>	Purple loosestrife	<i>Lythrum salicaria</i>	Water mint	<i>Menta aquatica</i>
Horse chestnut	<i>Aesculus x carnea</i>	Purple toadflax	<i>Linaria purpurea</i>	Water plantain	<i>Alisma plantago-aquatica</i>
Horsetail	<i>Equisetum arvense</i>	Ragged-robin	<i>Lychnis flos-cuculi</i>	Wavy St John's-wort	<i>Hypericum undulatum</i>
Ivy	<i>Hedera helix</i>	Ragwort	<i>Senecio jacobae</i>	Wayfaring-tree	<i>Viburnum lantana</i>
Japanese knotweed	<i>Fallopia japonica</i>	Red campion	<i>Silene dioica</i>	White bryony	<i>Bryonia dioica</i>
Lady's bedstraw	<i>Galium verum</i>	Red clover	<i>Trifolium pratense</i>	White campion	<i>Silene latifolia</i>
Laurel	<i>Lauraceae</i>	Red valerian	<i>Centranthus ruber</i>	White clover	<i>Trifolium repens</i>
Lavender	<i>Lavandula officinalis</i>	Reed canary grass	<i>Phalaris arundinacea</i>	White deadnettle	<i>Lamium album</i>
Lesser bulrush	<i>Typha angustifolia</i>	Reed sweet grass	<i>Glyceria maxima</i>	White melilot	<i>Melilotus albus</i>
Lesser burdock	<i>Arctium minus</i>	Reedmace species	<i>Typha</i> sp.	Wild carrot	<i>Daucus carota</i>
Lesser celandine	<i>Ranunculus ficaria</i>	Rhododendron	<i>Rhododendron ponticum</i>	Wild cherry	<i>Prunus avium</i>
Leyland cypress	<i>Leylandii</i> sp.	Ribwort plantain	<i>Plantago lanceolata</i>	Wild garlic	<i>Allium ursinum</i>
Lily of the Valley	<i>Convallaria majalis</i>	Rosemary	<i>Rosmarinus officinalis</i>	Wild geraniums	<i>Geranium maculatum</i>
Lime	<i>Tilia</i> sp.	Rough hawkbit	<i>Leontodon hispidus</i>	Wild strawberry	<i>Fragaria vesca</i>
Lords-and-ladies	<i>Arum maculatum</i>	Rough meadowgrass	<i>Poa trivialis</i>	Willow species	<i>Salix</i> sp.
Male fern	<i>Dryopteris filix-mas</i>	Rowan	<i>Sorbus aucuparia</i>	Willowherb	<i>Epilobium</i> sp.
March marigold	<i>Caltha palustris</i>	Russian vine	<i>Fallopia baldschuanica</i>	Winter heliotrope	<i>Petasites fragrans</i>
Marsh cinquefoil	<i>Potentilla palustris</i>	Scentless mayweed	<i>Tripleurospermum inodorum</i>	Wood anemone	<i>Anemone nemorosa</i>
Marsh fritillary	<i>Euphydryas aurinia</i>	Scots pine	<i>Pinus sylvestris</i>	Wood sorrel	<i>Oxalis acetosella</i>
Marsh pennywort	<i>Hydrocotyle vulgaris</i>	Sessile oak	<i>Quercus petraea</i>	Wood spurge	<i>Euphorbia amygdaloides</i>
Meadow buttercup	<i>Ranunculus acris</i>	Shepard's-purse	<i>Capsella bursa-pastoris</i>	Woundworts	<i>Stachys</i> sp.
Meadow fescue	<i>Festuca pratensis</i>	Silver birch	<i>Betula pendula</i>	Wych elm	<i>Ulmus glabra</i>
Meadow foxtail	<i>Alopecurus pratensis</i>	Silverweed	<i>Potentilla anserina</i>	Yarrow	<i>Achillea millefolium</i>
Meadowsweet	<i>Filipendula ulmaria</i>	Smooth tare	<i>Vicia tetrasperma</i>	Yellow-rattle	<i>Rhinanthus minor</i>
Montbretia species	<i>Crocsmia</i> sp.	Soft rush	<i>Juncus effusus</i>	Yew	<i>Taxus baccata</i>
Monterey pine	<i>Pinus radiata</i>	Sow thistle	<i>Sonchus arvensis</i>	Yorkshire fog	<i>Holcus lanatus</i>

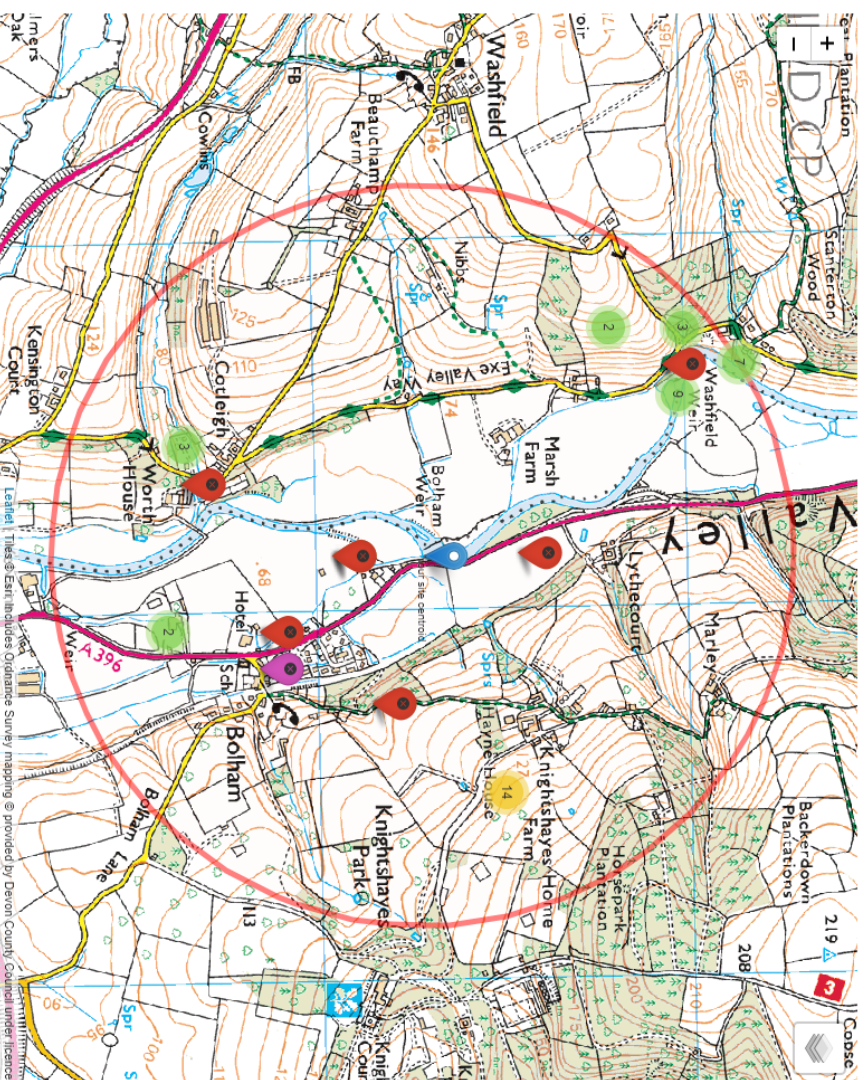
## Appendix 2



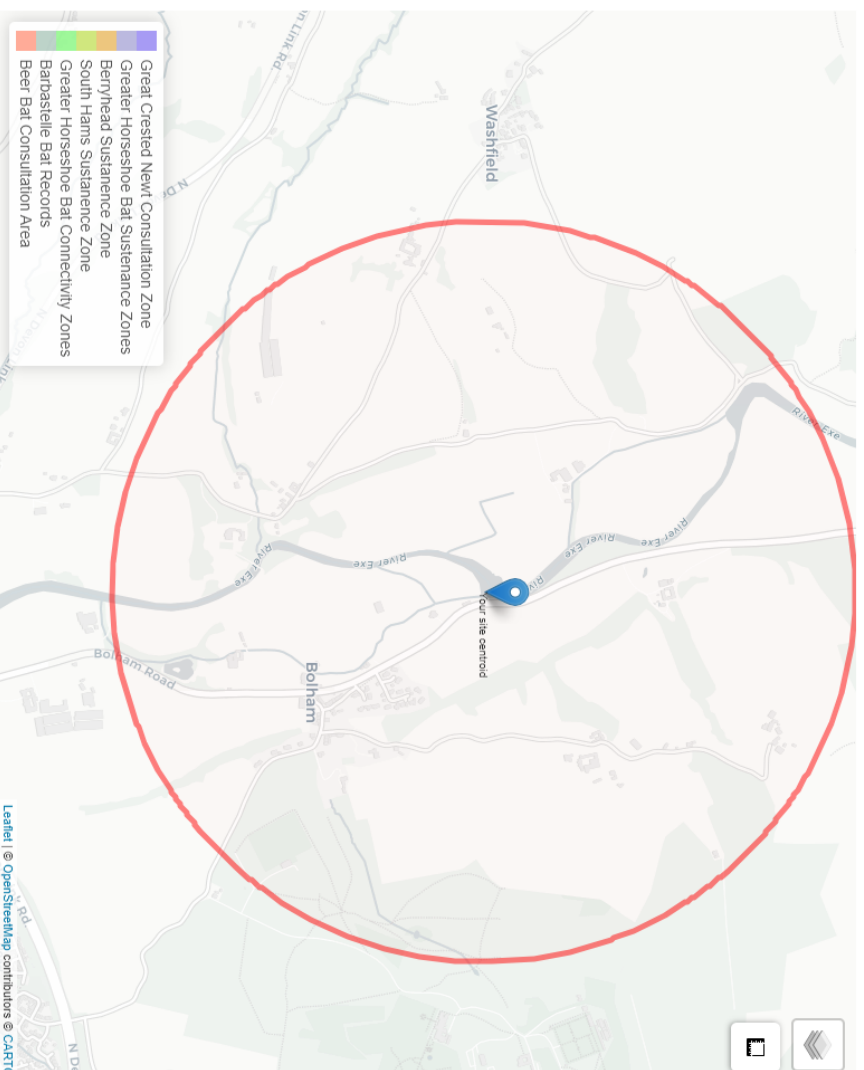
Map of statutory and non-statutory sites within 1 km of SS 94855  
 15288 (13/02/2024) Enq no. 402-3480



Map of legally protected & notable species records within 1 km of  
SS 9485 15288 (13/02/2024) Enq no. 402-3480



Consultation Zones within 1 km of SS 94855 15288 (13/02/2024)  
Enq no. 402-3480



## Appendix 3

## Appendix 3 – Wildlife Checklist

### A.1 Protected and priority species (relates to question 13a in the planning application form).

A tick or cross must be placed in all boxes in column two (shaded) and then, where there is a tick, all other boxes in that row. Where species are present please email this form to Devon Biodiversity Records Centre – DBRC@dbrc.org.uk.

Location: Bolham Weir, Tiverton

Grid reference for centre of site: SS 94855 15288

Planning Application reference: Not known

Name of surveyor and consultancy: Mr H. Colmer of Colmer Ecology Ltd

Date that surveys carried out: 12/02/2024

Sent to DBRC: N – data to be sent once information in the public domain as per terms and conditions

Species - terrestrial, intertidal, marine	Walkover shows that suitable habitat present and reasonably likely that the species will be found? Tick or cross	Detailed survey needed to clarify impacts and mitigation requirements?	Detailed survey carried out and included?	Species Present or Assumed to be present on site <u>Indicate</u> with P or A and name the species	Impact on species?	Detailed Conservation Action Statement included? Sets out actions needed in relation to avoidance / mitigation / compensation / enhancement	EPS offence committed? Three tests met?	Grid reference for specific location of species (if required for large sites)
Bats (roost)	✓	X						
Bats (flight line / foraging habitat)	✓	X						
Dormice	X							
Otters	✓	X						
Great crested newts ( <i>*check consultation zone</i> )	X							
Cirl buntings ( <i>*check consultation zone</i> )	X							
Barn owls	X							
Other Schedule 1 birds	X							
Breeding birds	✓	X						
Reptiles	X							
Native crayfish	X							
Water voles	✓	X						
Badgers	X							
Other protected species	X							
UK BAP Priority species	X							
Devon BAP key species	X							
Invasive species	X							

## A.2 Designations / important habitats / sites of geological importance (relates to questions 13 b & c in the planning application form)

A tick or cross must be placed in all boxes in column two and then, where there is a tick, all other boxes in that row.

Designation	Within site or potential impact. Tick or cross	Name of site / habitat	Detailed Conservation Action Statement included in report?	Habitat balance sheet included (showing area of habitats lost, gained and overall net gain)	Relevant organisation consulted & response included in the application?
<b>Terrestrial, intertidal, marine</b>					
<b>Statutory designations</b>					
European designations – Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR site or within Greater Horseshoe consultation zone	✓ - within 10 km	Culm Grasslands SAC			
Site of Special Scientific Interest (SSSIs)	✓ - within IRZ	Tidcombe Lane Fen SSSI, Hares Down, Knowstone, and Rackenford Moors SSSI			
Marine Conservation Zone (MCZ) ( <i>not before 2012</i> )	X				
National Nature Reserve (NNR)	X				
Local Nature Reserve (LNR)	✓ - within 3.3 km	Palmerston Park Wood LNR and Grand Western Canal County Park LNR			
<b>Non statutory wildlife designations</b>					
County Wildlife Site (CWS)	✓ - within 1 km	Knights Hayes CWS			
Ancient woodland	✓ - within 1.6 km	Coydon Copse, Rock Copse, Allers Wood and unidentified woodland			
Ancient trees	X				
Special verge	X				
UK BAP Priority habitat	✓ - within Site	Coastal and floodplain grazing marsh			
Local Biodiversity Network (mapped by Devon Wildlife Trust / through Green Infrastructure work)	X				
<b>Non statutory geological designation</b>					
County Geological Site (CGS or RIGS)	X				



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