

Visual Impact Provision (VIP)

Peak District (East) Project

Appendix 7K Fisheries Baseline Assessment

November 2018 Rev04

Quality information

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The methods adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The survey work described in this Report was undertaken in March 2017 and is based on the conditions encountered and the information available during those periods. The scope of this Report and the services are accordingly factual and therefore be subject to any minor limitations detailed within the report.

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Where field investigations are carried out, these have been restricted to a level of detail required to meet the stated objectives of the services. The results of any measurements taken may vary spatially or with time and further confirmatory measurements should be made after any significant delay in issuing this Report.

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1. Introduction

1.1 The Proposed Project

AECOM were commissioned by National Grid to undertake a fisheries baseline assessment at Dunford Bridge, South Yorkshire (centred approximately on Ordnance Survey grid reference 416540 402440). The assessment was undertaken to inform the Visual Impact Provision (VIP), Peak District (East) Project (hereafter referred to as the 'Proposed Project'). The Proposed Project is described in detail in Chapter 2 of the Environmental Assessment Report (EAR).

1.2 Purpose of the Report

This report seeks to provide results of a baseline fisheries assessment undertaken on the River Don. The main purpose for undertaking a fisheries baseline assessment is the proposed temporary bridge (herein referred to as 'Bridge 2') which will be constructed across the River Don (NGR: SE 1702 1968, location shown on Figure 7K.1) to accommodate the diverted Trans Pennine Trail (TPT).

Bridge 2, as detailed in Chapter 2 of the Environmental Assessment Report (EAR), will be constructed at the initial stage of construction of the Proposed Project and will be multifunctional as it will seek to accommodate the TPT users; pedestrians, cyclists, and horse riders, as well as Proposed Project construction traffic. The bridge will be removed following the construction phase of the Proposed Project.

The survey focused on the Bridge 2 crossing location as this will be a new bridge across the River Don, however the results from the desk study and the habitat assessment walkover are considered representative of the section of the River Don located within the extents of the Proposed Project. This therefore also includes the location of Bridge 1 which will be a new permanent access bridge to replace the existing wooden bridge structure (location shown on Figure 7K.1).

1.3 Defining the Study and Survey Area

Within this report the following terminology is used when referring to the geographic areas within which the baseline fisheries assessment work has been conducted:

- Desk Study Area – the area which was subject to the collection of desk study data from the Environment Agency in relation to the status of fish populations. The upstream and downstream extents of the Desk Study Area are shown on Figure 7K.1 and it includes four Environment Agency fish population survey sites (further details are provided in section 3.1).
- Habitat Survey Area – the upstream and downstream extents of the Habitat Survey Area are shown on Figure 7K.1; this was the area covered by the habitat walkover assessment to determine the quality, value and sensitivity of habitats for salmonids (further details are provided in section 3.2).

2. Legislation and Species Conservation Designations

There are a number of pieces of legislation and policy which relate to the conservation and protection of freshwater fish.

2.1.1 Salmon and Freshwater Fisheries Act (1975)

The Salmon and Freshwater Fisheries Act 1975 (SAFFA) primarily aims to provide protection for freshwater fish, with a particularly strong focus on salmon and trout. There are many activities that could constitute an offence under SAFFA including direct mortality, barriers to migration (e.g. fish passage) and degradation of habitats (e.g. low flows resulting in a loss to important spawning habitat).

Brown trout (*Salmo trutta*) are present in the Environment Agency fish population survey data in the Desk Study Area of the River Don.

2.1.2 Water Framework Directive

Fish are considered a key component of the biological element of the Water Framework Directive (WFD) (2000/60/EC). The purpose of the Directive is to establish a framework for the protection of inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater. The WFD aim is for all aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands to meet 'good status'. It is a requirement of the WFD that fish populations do not deteriorate in status.

The Proposed Project is located in the ‘Don from Source to Scout Dyke’ WFD waterbody (Waterbody ID: GB104027057500). The fishery is currently classed as ‘Moderate’ (2015 waterbody cycle), decreasing from ‘Good’ (2009 waterbody cycle). The Objective fishery status for the 2027 cycle is ‘Moderate’ (Environment Agency 2017a).

2.1.3 Species of Notable Conservation Interest

- EC Habitats Directive Annex II listed fish species of relevance to the Desk Study Area: bullhead (*Cottus gobio*)
- UK Biodiversity Action Plan (BAP) priority fish species of relevance to the Desk Study Area: brown trout
- Barnsley Biodiversity Action Plan (Barnsley Biodiversity Trust 2009) – this recognises that fish are of conservation interest in Barnsley and state: *‘Bullhead, brown trout and eel are all national priority species present in Barnsley. Salmon another national priority species is not present yet in Barnsley although found downstream of weirs in the Don catchment just outside Barnsley.’*
- Peak District Biodiversity Action Plan – Prioirty fish species listed on the Peak District Action Plan include bullhead, brown trout, European eel (*Anguilla anguilla*), brook lamprey (*Lampetra planeri)* and Atlantic salmon (*Salmo salar*).

3. Methodology

The baseline fisheries assessment comprised two main elements; a desk study to establish the status of the local fish population within the River Don catchment, followed by a salmonid habitat walkover assessment. The two elements combined seek to assess the quality, value (e.g. rare or widespread within the reach) and sensitivity of the aquatic habitat within the section of the River Don where the proposed bridge crossings are located in relation to the fishery resource.

3.1 Desk Study

A review of any existing fish population data within the 'Don from Source to Scout Dyke' Water Framework Directive (WFD) waterbody (Waterbody ID: GB104027057500) was carried out in order to ascertain the current status of the fishery.

Riverine fish populations are naturally transient, migrating both upstream and downstream in order to find food, reproduce and avoid threats (e.g. drought events). Therefore, in order to gain an understanding of the fish populations recorded in the upper reaches of the River Don, a desk study utilising the 2017 Environment Agency fish survey population data[1] (as detailed in Table 3.1) was undertaken. The upstream extent of the Desk Study Area was marked by the Windle Edge road crossing (NGR: SE 15781 02422), shortly downstream of the boundary of fish populations in the Upper River Don; Winscar Reservoir[2] (NGR: SE 15536 02635). The downstream extent of the Desk Study Area (as illustrated on Figure 7K.1) was marked by the A616 road bridge crossing (NGR: SE 19464 03022). Four Environment Agency fish population survey sites are located within the Desk Study Area and are detailed in Table 3.1.

Note: The Environment Agency fish population survey site named as 'Dunford Bridge Car Park' (Site C, Figure 7K.1) is somewhat misleading as it is not located by the existing car park for the site (located at NGR: SE 15811 02401), see Figure 7K.1 for its location.

Table 3.1 Environment Agency fish population survey sites reviewed as part of the desk study

Environment Agency survey site name	Figure 7K.1 reference	Environment Agency survey site ID	Survey site location (NGR)	Survey year/s assessed	Approximate location of survey site in relation to the proposed Bridge 2
Dunford Bridge (Upper site)	A	4075	SE1590002400	2005	1,420 m upstream
Dunford Bridge (Lower site)	B	4079	SE1633202402	2007, 2009, 2010, 2011, 2012, 2013, 2015	950 m upstream
Dunford Bridge Car Park	C	32088	SE1669702519	2008	550 m upstream
Soughley Farm DON/BT/Q/001	D	4035	SE1890002810	2005, 2007, 2009, 2010, 2011, 2012	1,800 m downstream

3.2 Habitat Walkover Assessment

Due to the predominance of brown trout recorded within the Desk Study Area, a salmonid habitat walkover assessment was deemed to be the most appropriate measure to determine the quality, value and sensitivity of habitats.

Whilst habitat issues operate at a very localised scale, it should be noted that single small sections of a river should not be viewed in complete isolation (Environment Agency, 1997). In order to assess the nature of the

[1] Length frequency and ageing data for the relevant Environment Agency fish population surveys obtained via the Request for information under the Freedom of Information Act 2000 (FOIA) / Environmental Information Regulations 2004 (EIR) - Fishery data request made on 14/03/2017. Note: Raw length frequency data not included due to file size.
[2] Winscar reservoir is deemed by the 'Environment Agency (2011) River Don main river weirs report' to be an impassable barrier to fish

habitat available to salmonid fish (specifically brown trout) in the vicinity of the proposed bridge crossing locations,,a salmonid habitat walkover assessment of the River Don was undertaken on 13th March 2017 by a Fisheries biologist (the extent of the Habitat Survey Area covered during the habitat walkover assessment is illustrated in Figure 7K.1).

The spatial extent and level of habitat to be mapped was determined according to the size and presence of any corresponding in-channel features potentially affecting the free movement of fish. The presence of a relatively large in-channel gauging weir structure approximately 950 m upstream (NGR: SE 16332 02402) of the proposed Bridge 2 identified on the day of the habitat walkover assessment was deemed the most appropriate point to mark the upstream extent of the habitat walkover assessment, due to its potential barrier to fish passage. The downstream extent was located approximately 580 m downstream of the proposed Bridge 2 at the site of a derelict stone bridge (NGR: SE 17769 02686). These two points mark the extent of the Habitat Survey Area.

The habitat walkover assessment was undertaken by foot on the north bank, starting from the upstream extent of the Habtat Survey Area working in a downstream direction. River levels (as assessed by online sources; Environment Agency (2017d)) on the River Don were at the lower end of their normal range, measuring between 0.34 m and 0.35 m (normal range = 0.34 m - 0.61 m). Water clarity was good, and the river bed visible throughout the Habitat Survey Area.

The objective of the habitat walkover assessment is to record the types of habitat and notable features (as detailed in Table 3.2) relevant to the life history requirements of brown trout, in line with the Environment Agency (1997) guidance and the relevant fishery bodies (Westcountry Rivers Trust 2010 and SEPA 2010). The presence/ absence and quantity of given habitat types and features can help define their value to the fishery within the Habitat Survey Area (e.g. are they widespread or scarce). The habitat types and notable features are recorded directly on to a map of the Habitat Survey Area in the field, with boundaries of the different habitat classifications being drawn to represent their approximate position within the watercourse. The results of the habitat walkover assessment are used to inform the description of the habitat recorded and its relevance to salmonid fish populations. Any factors impacting upon the fishery not listed in Table 3.2 were noted during the habitat walkover assessment and reported accordingly in Section 4.

Table 3.2 Habitat walkover assessment classification system (after Environment Agency, 1997, and Westcountry Rivers Trust, 2010)

Habitat type/ Notable Feature	Description
Spawning habitat & silted spawning habitat	Ideally stable but not compacted, easily workable with a boot without generating excessive silt release, a grain size between 16-64mm (based on a depth of 15-45cm and velocity of 22-55cm/s) Wild Trout Trust (undated) . Fines (<2mm grain size) to be less than 20% by weight.
Fry habitat	Shallow, = or <20cm deep, fast flowing (50-65cm/s), with surface turbulence and a gravel (size range 16-64mm) and cobble (size range 64-256mm) substrate.
Parr habitat	20-40cm deep, fast flowing (60-75cm/s), surface turbulent, with gravel/cobble/boulder (size>256mm) substrate.
Glides	= or >30cm deep, moderate velocity in range 10-30cm/s, surface smooth and unbroken, relatively even substrate of cobbles with finer material.
Pools	= or >40cm deep, no visible flow, surface unbroken, substrate with a high proportion of sand and silt.
Chute	Fast flowing water over bedrock channel slope, often steep. Includes waterfall.
Bankside/tunnel vegetation	Riparian vegetation ideally providing a mixture of open and closed canopy throughout the reach. Tunnel vegetation forms a complete closed canopy for extensive lengths.
Macrophyte beds	Submerged and emergent macrophytes providing localised hydraulic diversity.
Flow constrictions	Physical features providing a narrowing of the channel resulting in increased velocity and depth.
Obstructions to	Impassable falls, weirs, bridge sills etc., shallow braided river sections preventing

Habitat type/ Notable Feature	Description
migration	upstream migration during low flows.
Channel modification	Where bank structure has been artificially modified, straightened, reinforced or re-profiled (e.g. culverts, hard or soft engineering revetment, bridge crossings etc.).
Bank erosion	Bank showing one of the following features: a clean earth face, overhanging turf, turf in channel, recently fallen trees, leaning fence posts etc.
Modified channel width	Engineered, overly wide channel width to channel (e.g. as a result of livestock encroachment pressures).
Access point	Banks trampled as a result of livestock, vehicular or human activity.

4. Results

4.1 Desk Study

Fish population surveys carried out by the Environment Agency within the Desk Study Area between 2005 and 2015 (Environment Agency 2017b) recorded a total of four species, including brown trout, grayling (*Thymallus thymallus*), roach (*Rutilus rutilus*) and bullhead. Overall brown trout are the most widespread and temporally abundant species. The presence of 0+ (young of year) fish in each survey carried out at Dunford Bridge (Lower site) (Site B, Figure 7K.1) indicates the population are recruiting naturally. The presence of progressive age and size classes also indicates conditions within the Desk Study Area upstream of the proposed Bridge 2 are suitable for the successful development of the species into later life stages. A similar size range of brown trout are recorded at the Dunford Bridge Car Park survey site (Site C, Figure 7K.1), indicating a continuation of conditions throughout this upstream Desk Study Area. Downstream of the proposed Bridge 2, brown trout populations recorded at Soughley Farm survey site (Site D, Figure 7K.1) possess a very similar length-at-age structure to the fish recorded upstream, indicating similar conditions and free movement of fish occurs throughout the wider area encompassing the Proposed Project.

The gauging weir located at the upstream extent of the Desk Study Area (NGR: SE 16332 02402) potentially limits the free movement of fish, especially the weaker swimming species (e.g. small trout and grayling), however the presence of brown trout shortly upstream at the Dunford Bridge (Upper site) (Site A, Figure 7K.1) suggest trout may be able to pass the gauging weir, or suitable conditions are present in this short section of the River Don below Winscar Reservoir for a population to self-sustain.

Of the three remaining species, all are recorded sporadically both spatially and temporally. Grayling are scarce, recorded in low numbers both upstream and downstream of proposed Bridge 2 in 2005 and 2007 respectively. It is likely these fish were of a stocked origin[3]. Bullhead are largely absent from the Desk Study Area, recorded on a single occasion in low numbers during the 2010 survey of the Dunford Bridge (Lower site) (Site B, Figure 7K.1). It is believed the gradient of the channel in this reach of the upper River Don is naturally too steep to support bullhead. Roach are also largely absent from the Desk Study Area, with a single individual recorded in the 2012 survey of the Dunford Bridge (Lower site) (Site B, Figure 7K.1). Unlike brown trout, roach, and to a lesser extent grayling would not be expected this far upstream in the headwaters of such a watercourse (based on Huet's model of zonation (Heut, 1959)).

4.2 Habitat Walkover Assessment

The habitat walkover assessment is detailed below for each of the surveyed sections. Habitat types and notable features referred to in the baseline assessment are described in Table 3.2.

4.2.1 Upstream of the Proposed Bridge 2

A 950 m reach of the River Don upstream of the proposed Bridge 2 was assessed. The upstream extent of the Habitat Survey Area is marked by the presence of a heavily engineered twin crest gauging weir, which also marks the location of the Dunford Bridge (Lower site) (Site B. Figure 7K.1) fish population survey site. The crest on the south bank side was dry, whilst the crest on the north bank side was wet; with both sides of the weir potentially limiting the free movement of the fish population upstream towards the limits of Winscar Reservoir. A high, stone walled embankment runs flush with the river on the south bank, limiting habitat along this bank to instream boulder and cobbles. Habitat types in this upstream Habitat Survey Area alternate closely between an abundance of fry and parr habitat, with intermittent glides. Where the culverted Long Grain tributary enters the River Don, the river deviates in a northerly direction away from the stone walled embankment (as indicated by the Dunford Bridge Car Park fish survey site (Site C, Figure 7K.1). The approximately 120 m reach possesses well vegetated banksides, and patches of instream woody debris providing fish with marginal cover. Trees are scattered intermittently along both banks, with the trailing submerged root systems providing cover for fish and fish food organisms. The walled embankments continue downstream of the northerly bend in the river, shading much of the river channel from the south, potentially limiting instream productivity through a lack of sunlight entering the channel. Much of the north bank in this upstream Habitat Survey Area running downstream to the proposed Bridge 2 location appears to be poached by livestock, possessing a cropped grass bank with intermittent areas of scrub vegetation present, providing small amounts of marginal cover for fish. As a result of the effects of livestock

[3] Per comms Environment Agency local fisheries officer (14/03/17)

poaching, the north bank shows signs of bank erosion throughout much of the reach. Stone bank revetment appears to have been installed intermittently to the north bank (Plate 1) sheltering thin strips of marginal vegetation which offer some cover for fish.

Riparian vegetation is much improved where intermittent reaches of the river are fenced off, preventing livestock access. Overall, the coarse substrate present throughout this upstream Habitat Survey Area provides trout of all sizes with a valuable source of cover, particularly in the absence of instream and marginal macrophytes/ woody debris.



Plate 1 Upstream habitat walkover assessment Habitat Survey Area looking downstream at the stone bank revetment bordering the north bank

4.2.2 Immediate vicinity (10 m upstream and 10 m downstream) of the Proposed Bridge 2

As a result of livestock poaching, the north hand bank at the proposed Bridge 2 location possesses a cropped grass bank with signs of erosion (as indicated by the bare earth banksides illustrated in Plate 2). The south bank at the proposed Bridge 2 location possesses a wooden fence structure which is showing signs of subsidence into the wetted area of the channel (Plate 3). The otherwise steep gradient of the south bankside decreases beside the fence where an old crossing point appears to exist. Immediately upstream of the proposed Bridge 2, a short section of fry habitat is present (Plate 3). Immediately downstream, a deeper glide is present (Plate 2).



Plate 2 Proposed Bridge 2 location - view looking downstream at the poorly vegetated, bare earth north bank side



Plate 3 Proposed Bridge 2 location – looking upstream

4.2.2.1 Downstream of the Proposed Project Bridge 2

A 580 m reach of the River Don downstream of the proposed Bridge 2 was assessed. Shortly downstream of the proposed Bridge 2, parr and glide habitats are recorded. Similar to the reach upstream of the proposed Bridge 2, vegetation and marginal habitat is greatest where the wet/ boggy banksides areas exist, whilst bank erosion is

also present where livestock poaching persists (Plate 4). Intermittent marginal tree cover and instream large woody debris is present throughout much of the reach, providing fish with a source of cover. A small boulder weir is present (Plate 5) shortly upstream of the confluence with the small culvert entering from the south bank. The low head difference across the crumbling feature is unlikely to limit fish passage. A short section of glide habitat is created by the minor impoundment of the weir, followed by intermittent fry and parr habitat downstream.



Plate 4 Bank erosion on the north bank of the downstream reach of the Habitat Survey Area



Plate 5 Boulder weir located in the downstream Habitat Survey Area

A potential spawning site was recorded downstream of the weir (Plate 6). Shortly downstream of the Habitat Survey Area, a redundant steel girder weir structure is present (Plate 7). This apparently leaky structure is unlikely to impact fish passage, with the exception of during periods of particularly low flows.



Plate 6 Potential spawning habitat located in the downstream reach of the Habitat Survey Area



Plate 7 Steel girder weir located shortly downstream of the Habitat Survey Area

5. Evaluation

Fry, parr and adult salmonid habitat is both abundant and widespread throughout the Habitat Survey Area. A largely consistent, alternating pattern of fry/parr/glide habitat was observed throughout the Habitat Survey Area, including the location for the proposed Bridge 2, providing brown trout with the variety of different habitats required in order to complete their life cycle.

The predominance of large cobble and boulder substrate throughout the Habitat Survey Area provides trout of all sizes with an abundant source of cover and the diversity of flows associated with the different habitat types recorded. Whilst livestock poaching and an artificial bank structure is present along much of the north bank and south bank respectively, instream large woody debris, submerged tree roots and overhanging marginal vegetation provides fish and fish food organisms with a mosaic of different habitats. In the absence of obvious spawning habitat recorded during the habitat walkover assessment, the presence of fry, parr and adult brown trout recorded in Environment Agency fish population surveys both upstream and downstream of the proposed Bridge 2 location indicate fish are recruiting naturally within the Habitat Survey Area. The similarity of the brown trout populations recorded between fish population survey sites and a lack of significant barriers to fish passage recorded in the Habitat Survey Area supports the theory of an inter-connected population being present throughout the Habitat Survey Area encompassing the proposed Bridge 2.

The results of the desk study and the habitat walkover assessment are considered to be representative of the sections of the River Don that will be crossed by the two bridge crossings to accommodate the Trans Pennine Trail diversion; one existing bridge to be replaced (Bridge 1) and one proposed temporary new bridge (Bridge 2).

6. References

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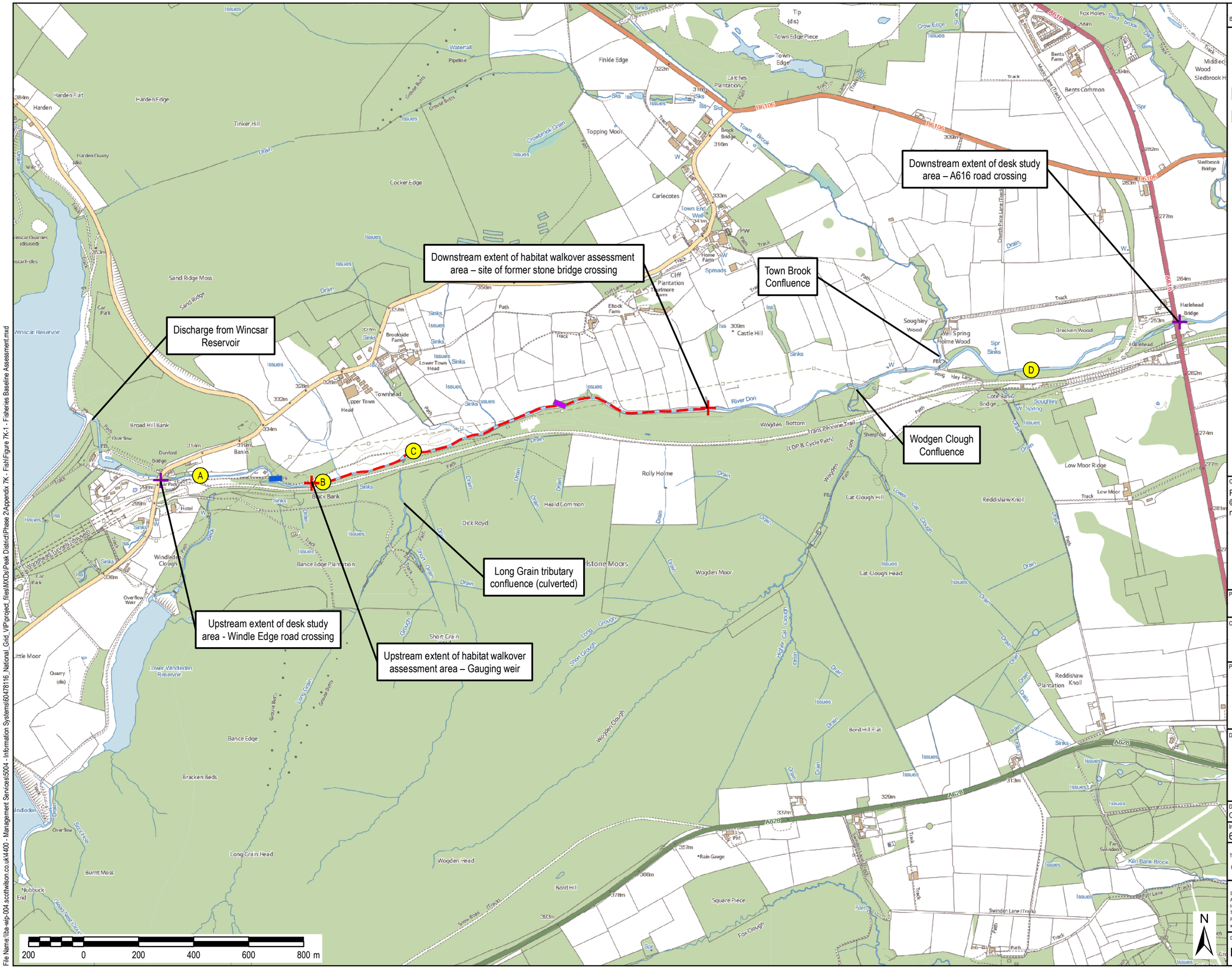
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Figure 7K.1 - Fisheries Baseline Assesment



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KEY

Bridge Locations

- Bridge 1 Location
- Bridge 2 Location

Data Source Extent

- Desk Study
- Habitat Survey Area Upstream/Downstream Extents
- Habitat Survey Area

Environment Agency Fish Population Survey Sites:

- (A) Dunford Bridge (Upper Site)
- (B) Dunford Bridge (Lower Site)
- (C) Dunford Bridge Car Park
- (D) Soughley Farm DON/BT/Q/001

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Appendix A Environment Agency Fish Population Data

This data is extracted and adapted from the Environment Agency (2017) Freshwater Fish Counts for all Species, all Areas and all Years https://ea.sharefile.com/d-s5b6918d01884a129 Accessed 06/03/2017

SITE NAME	SITE ID	SITE_NAME	SURVEY ID	EVENT_DATE	SURVEY_ NGR	SURVEY_ EASTING	SURVEY NORTHING	SURVEY LENGTH	SURVEY WIDTH	SURVEY AREA	FISHED WIDTH	FISHED AREA	SURVEY METHOD	SURVEY STRATEGY	NO_OF_ RUNS	LATIN_NAME	RUN1	RUN2	RUN3	ALL_ RUNS	SPCSNO	SPCSNO_ SE	SPCSPV	SPCSPV_SE	SURVEY_ STATUS
River Don	4079	Dunford Bridge (lower site)	102227	05/10/2006	SE1670002500	416700	402500	50	2	100	2	100	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	116	34	9	159	162	2.3805	0.722727	0.038302	Completed
River Don	4079	Dunford Bridge (lower site)	108100	07/09/2007	SE1670002500	416700	402500	50	2	100	2	100	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	140	42	11	193	197	2.723154	0.717472	0.035103	Completed
River Don	4079	Dunford Bridge (lower site)	120136	19/08/2009	SE1633202402	416332	402402	50	2	100	2	100	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	44	19	11	74	82	5.507764	0.532374	0.076468	Completed
River Don	4079	Dunford Bridge (lower site)	124150	25/08/2010	SE1669702519	416697	402519	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	62			62					Completed
River Don	4079	Dunford Bridge (lower site)	124150	25/08/2010	SE1669702519	416697	402519	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Cottus gobio									Completed
River Don	4079	Dunford Bridge (lower site)	128638	12/09/2011	SE1633202402	416332	402402	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	75			75					Completed
River Don	4079	Dunford Bridge (lower site)	132803	07/08/2012	SE1633202402	416332	402402	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	108			108					Completed
River Don	4079	Dunford Bridge (lower site)	132803	07/08/2012	SE1633202402	416332	402402	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Rutilus rutilus	1			1					Completed
River Don	4079	Dunford Bridge (lower site)	138491	30/08/2013	SE1633202402	416332	402402	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	120			120					Completed
River Don	4079	Dunford Bridge (lower site)	146431	14/09/2015	SE1633202402	416332	402402	50	2	100	2	100	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	101			101					Completed
River Don	4075	Dunford Bridge (upper site)	87764	13/09/2005	SE1590002400	415900	402400	50	2	100	2	100	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	159	57	19	235	245	4.643956	0.652778	0.035635	Completed
River Don	4075	Dunford Bridge (upper site)	87764	13/09/2005	SE1590002400	415900	402400	50	2	100	2	100	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Thymallus thymallus	1	0	0	1	1	0	1	0	Completed
River Don	32088	Dunford Bridge Car Park	114901	19/08/2008	SE1669702519	416697	402519	50	1.5	75	1.5	75	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	33	13	6	52	55	2.951881	0.604651	0.082084	Completed
River Don	4035	Soughley Farm DON/BT/Q/001	86402	15/08/2005	SE1890002800	418900	402800	100	8	800	8	800	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	315	86	40	441	456	5.452949	0.67638	0.024993	Completed
River Don	4035	Soughley Farm DON/BT/Q/001	86402	15/08/2005	SE1890002800	418900	402800	100	8	800	8	800	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Thymallus thymallus	4	3	0	7	7	0.578327	0.7	0.192776	Completed
River Don	4035	Soughley Farm DON/BT/Q/001	108625	06/09/2007	SE1890002800	418900	402800	100	5	500	5	500	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	133	40	25	198	210	5.549044	0.611111	0.041523	Completed
River Don	4035	Soughley Farm DON/BT/Q/001	108625	06/09/2007	SE1890002800	418900	402800	100	5	500	5	500	DC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Thymallus thymallus	1	1	0	2	2	0.384353	0.666667	0.384353	Completed
River Don	4035	Soughley Farm DON/BT/Q/001	120138	19/08/2009	SE1890002810	418900	402810	100	5	500	5	500	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	91			91					Completed
River Don	4035	Soughley Farm DON/BT/Q/001	124141	25/08/2010	SE1890002810	418900	402810	100	5	500	5	500	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	108			108					Completed
River Don	4035	Soughley Farm DON/BT/Q/001	128722	12/09/2011	SE1881502800	418815	402800	50	5	250	5	250	DC ELECTRIC FISHING	SINGLE CATCH SAMPLE	1	Salmo trutta	66			66					Completed
River Don	4035	Soughley Farm DON/BT/Q/001	134403	04/09/2012	SE1890002810	418900	402810	100	5	500	5	500	PDC ELECTRIC FISHING	CATCH DEPLETION SAMPLE	3	Salmo trutta	42	17	4	63	65	2.142073	0.670213	0.066973	Completed

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