

WILD TROUT TRUST

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Weston Farm (River Lambourn) – Advisory Visit



An advisory visit by Nick Lawrence & Rupert Kelton of the Wild Trout Trust

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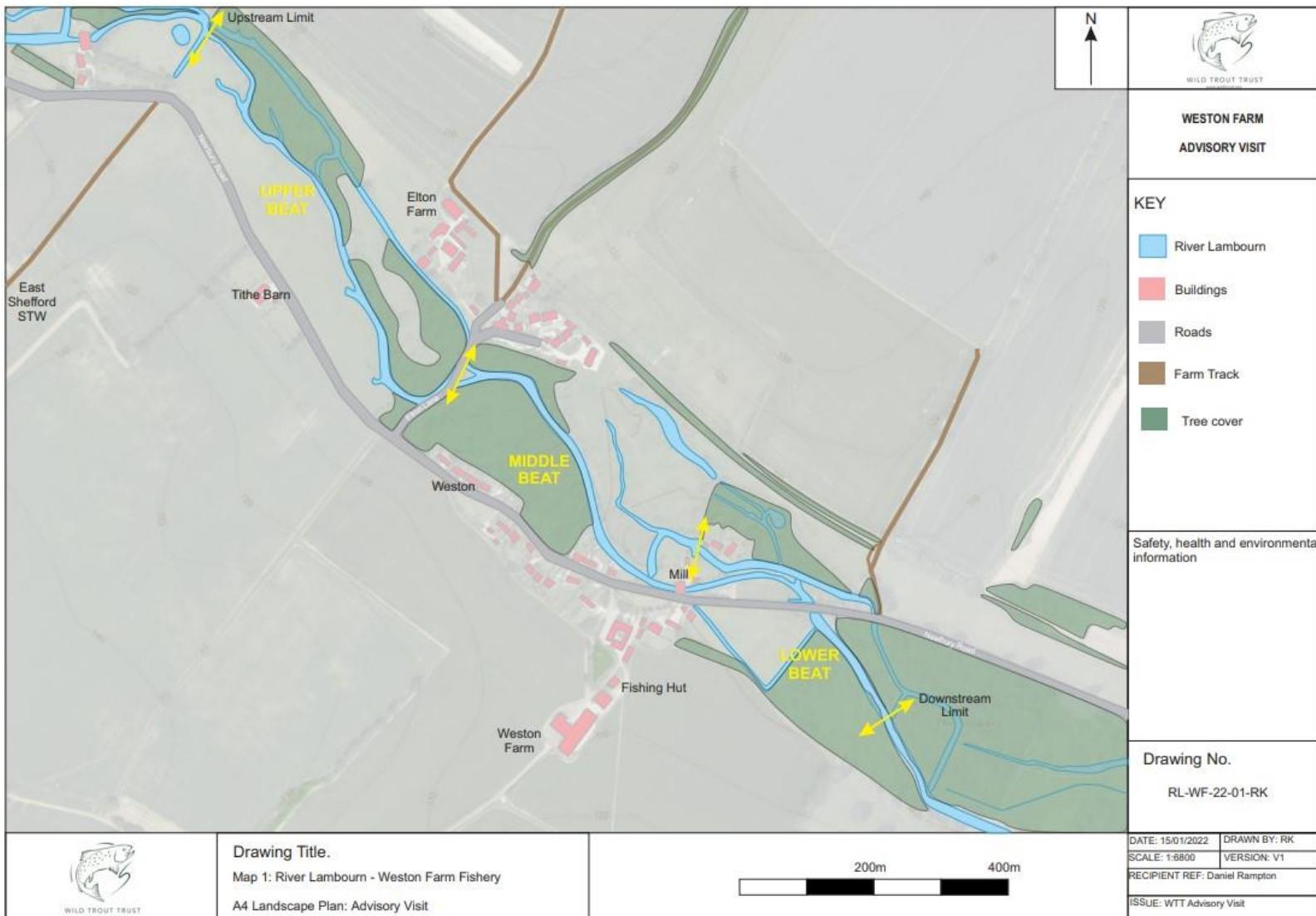
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1.0. Introduction

This advisory report is the output of a visit undertaken by Nick Lawrence and Rupert Kelton of the Wild Trout Trust (WTT), over approximately 2km of the River Lambourn at Weston Farm, West Berkshire. A walkover of the site was requested by the fishery manager to advise on opportunities for habitat enhancement and discuss the maintenance regime.

Comments in this report are based on observations on the day of the site visit and discussions with the fishery manager, Nick Lawrence and Rupert Kelton. Throughout the report, normal convention is followed with respect to bank identification i.e. banks are designated Left Bank (LB) or Right Bank (RB) whilst looking downstream. The walk-over assessment started at the downstream end of the reach and worked upstream.

Map 1: The Weston Farm Fishery



2.0. Catchment overview

The River Lambourn is a classic chalk stream which rises near the village of Lambourn in the chalk of the Berkshire Downs. The upper 10km of the river are seasonal, forming a characteristic winterbourne that normally experiences an absence of flow between late summer into the winter. The perennial headwaters are located near Great Shefford and from here, the river flows in a south-easterly direction, for approximately 16km, to Newbury where it joins the River Kennet. The river drains a mainly rural catchment of approximately 214km².

The Lambourn is renowned for supporting a high diversity of aquatic plants and invertebrates with a number of nationally and internationally rare or protected invertebrates, mammals and birds. This has resulted in the river being designated a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC), demonstrating the ecological value of the river both in a national and European context and also imposing more significant controls and restrictions on the management of the river.

The most recent (2019) Water Framework Directive status for the Lambourn (water body ID no GB106039023220) classifies the river as having 'moderate' ecological status. The issues preventing the Lambourn from reaching 'good' or 'high' ecological status are related to sediment from land and road drainage, invasive species, rural land management and barriers created by ecological discontinuity. During our visit to Weston Farm, several of these issues were present and witnessed 'on the ground' as having a detrimental impact on the ecological health of the river. The Water Framework Directive data, collected by the Environment Agency, indicates that water quality on the Lambourn has improved since 2016 due to improved dissolved oxygen and phosphate levels. However, fish and plant populations are still only considered to be of 'moderate' quality. Full details of the Water Framework Directive data are available on the Environment Agency's, Catchment Data Explorer:

[Lambourn \(Source to Newbury\) | Catchment Data Explorer | Catchment Data Explorer](#)

Natural England's 2019 condition assessment of the riverine SSSI assessed the Lambourn as 'Unfavourable – Recovering'. It noted that recent habitat works and physical river restoration have helped improve the condition of the river. The full condition assessment for the River Lambourn SSSI is available on Natural England's, Designated Sites View:

[https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S2000155&ReportTitle=River Lambourn SSSI](https://designatedsites.naturalengland.org.uk/ReportUnitCondition.aspx?SiteCode=S2000155&ReportTitle=River%20Lambourn%20SSSI)

3.0. Fishery overview

Until 2021 the fishery has been managed commercially, by a third-party, offering day-tickets for angling customers. The fishery has been managed sympathetically but parts of the river were stocked to meet the demands of the previous operation.

The management of the fishery has now been taken back in-hand by Weston Farm and although it will continue to operate as a commercial fishery, the intention is to reduce the fishing pressure and make the fishery available to a limited number of season rods, as members of a syndicate.

The new fishery manager and advisory visit recipient would like some guidance from the Wild Trout Trust on how best to continue the enhancement of the fishery for wild trout, grayling, invertebrates and wildlife, with a view to gradually scaling back the numbers of stocked brown trout.

The fishery is divided into three beats, a lower, middle and upper beat, with the upper beat being offered as a wild fishery with minimal management and no stocking.

4.0. Habitat Assessment

4.1. Lower Beat

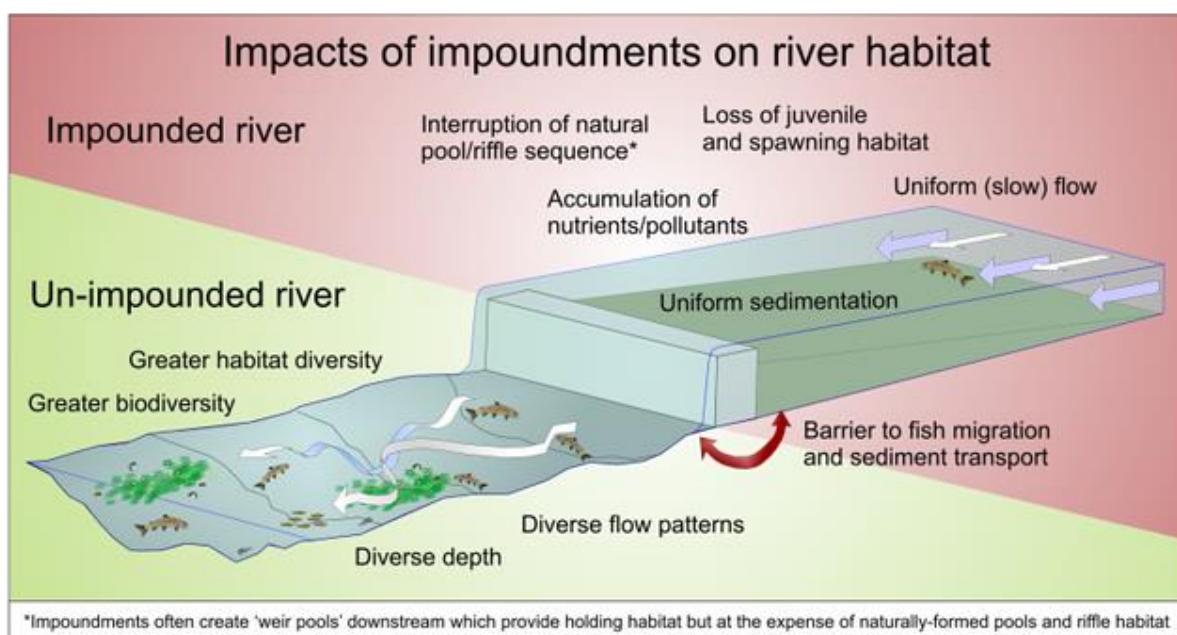
The downstream limit of the fishery is the footbridge ($51^{\circ}27'32''N$, $001^{\circ}25'13''W$) marking the boundary with Welford Park.

The channel here is slightly uniform with a laminar flow which indicates that the river is impounded.

Looking at the [Kennet & Lambourn SSSI Restoration Plan \(2011\)](#) it appears there is a weir and a large cascade downstream at Welford Park. The large cascade is described as 'having a significant impounding effect on approximately 150m of river' and it suggests that fish passage is unlikely up any of the structures.

The current status of the structures at Welford Park is unknown but it is possible that these structures are the cause of the slower flows and increased levels of sedimentation that are present at the lower end of the fishery at Weston. Chalk stream reaches that have more variety in channel shape and form (pools, riffles and glides) provide more valuable wild trout habitat than long sections of impounded channel, like there is here and downstream to Welford.

Figure 1: Illustration of impacts of impoundments on river habitat



Further investigations with the Environment Agency would be worthwhile to establish what changes have been made or are planned for the structures at Welford Park.

Despite the impoundment there is good marginal habitat along this reach with plenty of overhanging branches and willow scrub along the unmanaged LB, as well as signs of a marginal fringe on the RB.

Continued 'light touch' management of the marginal fringe on the RB will be beneficial and, generally speaking, the thicker and more diverse the fringe is allowed to become the better for providing refuge and cover for juvenile fish and adults alike. Similarly, the habitat along the bank edges, where the aquatic and terrestrial communities meet and integrate, can be a hugely valuable source of food. Managed correctly, the margins will benefit the river's fish by providing a terrestrial subsidy of invertebrates falling in the river.

Whilst an unbroken marginal fringe would be considered optimal from a habitat perspective it can make sense, for the management of the fishery, to cut a few small gaps (<1m wide) in the areas where you would like to encourage rods to access the river, rather than entering and exiting at any given point and disturbing or potentially damaging the margin.

Photo 1: View upstream from the lower limit of the fishery.



Upstream of the footbridge, the small section of channel adjacent to the weed rack highlights the impounding effect of the river. By contrast, where the weed rack has narrowed the channel the increased flow velocity has allowed the river to maintain a clear gravel bed as seen in **Photo 2**.

Photo 2: A section of clear gravel bed where the weed rack has pinched the channel and increased flow velocity.



Where silt is collecting on the riverbed, particularly in the central channel, it is often a sign the river wants to be narrower. Strategically adding course woody material to the channel can improve flow diversity, clearing or scouring the bed, as seen here, which will improve the quality and range of habitats, helping to increase spawning opportunities.

Upstream of the weed rack there are some good examples of where this has been done in the past. The tree limb placed in the channel from the RB, shown in **Photo 3**, is not only helping provide the sort of complex habitat and cover that will favour trout, it has also helped to speed-up the flow in the central channel, whilst slowing the flow along the right-hand margin, encouraging sediment deposition and, over-time, collecting silt and marginal plants. The overall effect of this has created a new bank edge, further narrowing the channel and restoring a more natural flow regime. Likewise, downstream, there is another section of woody material on the LB which is doing a similar job and working in tandem with the tree limb upstream to help add sinuosity to an otherwise fairly uniform channel.

There is scope to add more woody material to the channel in the section, shown in **Photo 4**, upstream towards the road bridge. Below the bridge, the impoundment caused by the structures at Welford Park is no longer evident and there is some good riffle habitat with evidence of several redds during the visit.

Photo 3: Example of woody material previously installed to help improve the flow regime and provide instream habitat.



Photo 4: Opportunity here for the addition of more woody material.



Immediately below the road bridge there is potential to enhance the gravel riffle by creating a brushwood mattress along the RB (**Photo 5**). This should help concentrate flow over the riffle and provide accessible refuge for juvenile fish. Some siding-up of the overhanging branches and limbs from the trees above this area will allow more light onto the structure, enabling the growth of marginal plants which should help stabilise the structure. Translocating some flag-iris and sedge from nearby will also help speed-up this process.

Photo 5: Gravel riffle providing good spawning habitat + scope for brushwood berm on RB.



Upstream of the road bridge, there is an area on the LB known to provide important habitat for the Desmoulin's whorl snail, *Vertigo moulinsiana*. This rare wetland snail lives on the leaves of tall wetland plants, such as the reed sweet-grass and tussock sedge found on this part of the reach. Cutting or mowing should be avoided as this will remove the tall vegetation that the snail requires. Tidy riverbanks or heavy trampling will eradicate the snail. Allowing this area to remain as relatively swampy, unshaded ground with tall waterside plants should help to maintain a healthy population of snails whilst also providing good marginal habitat for fish and invertebrates.

There is also further scope to add woody material along the RB above the road bridge. Winning timber from the Goat Willow *Salix caprea*, seen on the LB in **Photo 6**, could help reduce shading to the snail habitat and provide good material that can be used to enhance sinuosity and habitat in this part of the channel.

Photo 6: Desmoulin's whorl snail habitat on LB and opportunity to add woody material to the channel on the RB.



Approximately 100m to the east of the road bridge, along the Newbury Road, there is a farm track leading to pony paddocks and arable land to the north. Where the track meets the Newbury Road (51°27'37"N , 001°25'13"W) there are a couple of grips where water from the track drains into the river. During heavy rainfall events this track is likely to be a source of sediment pollution into the River Lambourn.

Simple solutions such as installing a cross-drain and sediment trap on the track (**Photo 8**), resurfacing or relocating the access to the pony paddocks (**Photo 9**) and investigation of other measures to take water away from the track, further to the north, would make an important contribution to reducing sediment pollution in the river and the wider catchment.

The following options, amongst others, are available under the Countryside Stewardship Capital Grants Scheme:

- RP5 (Cross drains) @ £245/drain
- RP7 (Sediment ponds and traps) @ £10/m²
- RP4 (Livestock and machinery hardcore tracks) £33/m

Contacting the local Catchment Sensitive Farming Officer, Karen Davis, would be a good next step to explore further details of what measures would be most appropriate and how these can be funded.

Photo 7: Farm-track acting as a source and pathway for sediment pollution



Photo 8: Opportunity for cross-drain and sediment trap



Photo 9: Opportunity to resurface access or relocate gateway



The small section of channel adjacent to the farm-track has some excellent riffle habitat with several redds evident at the time of the visit. Continuing to leave this area as a refuge will help pay dividends in replenishing stocks of wild fish.

Further upstream, above the weed rack, there is more good trout habitat with thick margins, low overhanging cover and a clear gravel bed, supporting patches of water crowfoot *Ranunculus* spp.

The river here, however, has historically been altered and is a legacy of the old water mill structure upstream. The channel along this section is perched and there is a sluice, mid-way along the reach, on the RB, which has apparently had issues with breaches in the past and is understood to have been repaired approximately 10 years ago with funding from Natural England.

During the visit, there was evidence of the beginnings of another breach at this structure, as seen in **Photo 11**. Infilling the breach with stone and chalk and creating a small brushwood berm could help in the short-term to prevent the breach from worsening but WTT would recommend the fishery undertake their own investigations into a longer-term solution.

Photo 10: Sluice on the RB of the perched mill leat ($51^{\circ}27'39''N$, $001^{\circ}25'20''W$)



Photo 11: Breach at the downstream end of the structure



Another legacy of the historic alterations to the River Lambourn, most likely a result of dredging work carried out by the National Rivers Authority, is the heavily degraded / partially destroyed section of channel in the reach below the mill ($51^{\circ}27'39''N$, $001^{\circ}25'22''W$). The river here has been robbed of all the natural characteristics you would expect from a classic chalk stream and left as an over-wide, over-deep, canal-like waterbody, as seen in **Photo 12**. In its current state this section of river is not favourable for supporting healthy populations of wild trout. However, it would be possible to restore this reach by reintroducing clean gravel into the channel to raise the level of the bed and restore the natural gradient.

This would be a worthwhile aspiration for the fishery in the longer-term, both by way of providing a decent length of additional fishing and helping to restore a valuable section of chalk stream habitat. The Wild Trout Trust and / or the local Rivers Trust (Action for the River Kennet) would be able to help source funding and provide support with a restoration project of this nature.

Photo 12: Dredged and heavily degraded section of channel below the mill.



The final section of the mill leat, past Marsh Cottage and upstream to the footbridge, which marks the boundary between the lower and middle beats, has good habitat for holding fish, the river has a clear gravel bed and there were healthy patches of water crowfoot, *Ranunculus* spp. starwort, *Callitrichie* spp. and water parsnip, *Berula erecta*.

4.2. Middle Beat

There is more quality habitat on up through the start of the middle beat (**Photo 13**), towards the mill hatch pool (**Photo 15**), with good gradient, clean gravel and signs of a range of emergent plants. A brushwood mattress in the space shown on the LB in **Photo 14** could be used to enhance marginal plant encroachment and broaden the margin to exaggerate the sinuosity of the channel.

Photo 13: Looking up-stream from the footbridge at the lower limit of the middle beat (51°27'40"N , 001°25'27"W).



The pool below the mill hatch (51°27'39"N , 001°25'31"W) is providing great holding habitat for adult trout with some overhead cover offered by the surrounding trees. There is good marginal cover on the LB, controlled by the fishery, but unfortunately the RB appears to be more intensively managed, and the fringe is less well established than it could be.

It is important that the hatches here are operated to provide as much flow as possible into the channel running back down to the footbridge. Compared with the heavily degraded section of the river downstream of the mill, this has the most favourable habitat for fish and so maintaining sufficient flows will help support the quality of the habitat present and enable plant, invertebrate and fish communities in this reach to flourish. Also, the fish pass here establishes a route, via Marsh Cottage, for fish to bypass the mill structure and move freely up and down stream.

Photo 14: Space for brushwood mattress on LB to help extend the margin



Photo 15: Mill hatch pool with fish pass nearest the LB.



Upstream of the mill, the river is impounded by the mill structure and the flow is slow and uniform. The 'light touch' management of the marginal fringe on the LB, owned by the fishery, is contrasted with the solid vertical revetment on the RB with a garden lawn that is mown right to edge of the bank. When a riverbank is poorly managed like this, it can rob the river, (and the owner's garden) of all the benefits of a marginal fringe and ecologically disconnect the river from the land around it. In comparison the LB will be providing habitat for fish, insects and other wildlife. Water voles, in particular, rely on access to the banks for their burrows and plenty of tall vegetation to provide them with food and cover from predation.

Photo 16: Solid vertical revetment on the RB, contrasting with the thick marginal fringe on the LB, allowing far more biodiverse habitat.



Upstream of the gardens, on the RB, there is an area that historically has had issues with Himalayan Balsam. This is a non-native invasive species with a red stem and characteristic purplish-pink slipper-shaped flowers which appear in June. Himalayan balsam plants grow in dense stands that suppress the growth of native flora so that when the plants die back, in the autumn, they can leave banks bare of vegetation and liable to erosion. The seeds are easily dispersed and balsam can quickly colonise a reach of river, which left unchecked, can cause problems downstream in the catchment.

It would be worthwhile keeping an eye out for any Himalayan balsam growth in the spring and removing it before the plants set seed. If there is a large stand of balsam then contacting the local Rivers Trust (Action for

the River Kennet) to arrange help from their volunteers, can make this a more manageable task.

Photo 17: Area on RB where Himalayan balsam has been an issue in the past.



Upstream (**Photo 18**), there is some very good-looking margin on the RB with plenty of scrub and low hanging cover providing complex habitat and refuge for fish. At the time of the visit this reach appeared to be suffering from low flows, on the back of a dry autumn, and not representative of how it would typically look when the springs rise later in the year. To help provide this reach with more resilience against low flows and the effects of climate change it would be worth looking to add some strategically placed woody material from the LB and encouraging a thicker margin to develop.

Moving upstream there are a series of woody flow deflectors that were installed as part of a previous habitat project with the Environment Agency. These seem to be functioning well and providing variation in flow velocities and depth. In the longer term it would be worth keeping an eye on old habitat works like these and replacing or bolstering them when they start to rot out or reduce in size. Likewise, there are a few old scaffolding posts, here and elsewhere on the fishery, that have historically been used to hold instream structures in place. It would be good to gradually try and remove these and where necessary replace with chestnut posts.

Photo 18: Reach suffering from low flows, could be enhanced with woody material in the channel and encouraging the development of a thicker fringe on LB.



Further upstream is the Elton Lane hatch pool (**Photo 20** / 51°27'48"N , 001°25'40"W) which provides a large pool area with good holding habitat for larger adult fish. At the tail of the pool there is a nice section of riffle, offering quality spawning habitat. The LB here, adjacent to the old fishing hut, has gradually been eroded and the river has become slightly overwide. A brushwood berm could help protect the bank from further erosion and as it consolidates with sediment and plants it will help concentrate flow over the main riffle in the central channel.

The hatch at the top of the pool has been breached, with some of the flow seeping around the left-hand side of the structure. This breach is not a particular cause for concern in the short-term but would be worth keeping an eye on.

Upstream to the road bridge there is more good quality marginal habitat on the LB. Encouraging a thicker more diverse margin on the RB (**Photo 21**) would help stabilise this section of vertical bank and reduce the opportunity for erosion during higher flows.

Photo 19: Space for brushwood berm on LB to prevent erosion and concentrate flow over central riffle.



Photo 20: Hatch pool providing area of deeper water for adult fish.



Photo 21: Vertical bank along RB at the top of the middle beat, between Elton Lane and Elton Lane hatch pool.



4.3. Upper Beat

The upper beat begins at Elton Lane ($51^{\circ}27'48''N$, $001^{\circ}25'46''W$) and moving upstream from the lane, the river is buffered by a good expanse of relatively unmanaged meadow on the RB (**Photo 22**).

This reach is a lovely example of a classic chalk stream with good gradient, variation in channel form and depth, excellent sections of loose gravel and growth of water crowfoot, starwort and water parsnip. It is a great demonstration of how 'less' can equal 'more' in the management of a fishery and the benefits that 'light-touch' maintenance can have for a river; enabling good habitats to flourish naturally with minimal intervention.

It is understood that the upper beat has not been stocked and has been offered as a wild fishery. The demand for wild trout fishing has increased over recent years and there are a good number of anglers looking for an alternative experience to some of the more traditionally manicured chalk stream reaches. Managing a wild trout fishery or keeping part of a fishery unstocked can offer a cost-effective alternative to stocking and the money saved on farmed fish can be put towards habitat improvement.

However, for a wild fishery to be viable it will require significant lengths of the channel, like the upper beat at Weston, to be managed for the fish, rather than the angler, and to be regularly rested. The fish can be caught and released multiple times but fishing a beat the day after a skilful angler will make it tough for a beginner. Therefore, the angling pressure needs to be more carefully considered than on stocked fisheries.

Photo 22: Great example of a 'natural' chalk stream on the upper beat.



There are lots of good examples on the upper beat where woody material has been added to the channel, creating habitat diversity and more opportunities to support a greater number of fish (e.g. **Photo 23**). Over time, the fishery can seek to add to these or where trees and limbs naturally fall into the river, either to leave them in place or suitably adjust them and secure them into position with chestnut posts and wire or coir rope.

It is understood that the fishery would like to plant some trees along the edge of the meadow which would help provide dappled shade and protection from the wind.

The following options are available to fund trees planting through the Countryside Stewardship Capital Grant Scheme:

- TE4: Supply and plant tree @ £1.28 per tree
- TE5: Supplement for use of individual tree-shelters @ £1.60 per unit

Photo 23: Exemplar management, harnessing what nature gives the river.



At the top end of the reach, the management of the meadow on the RB changes, with horses being grazed in a large paddock. It looks to be over grazed and heavily poached, with unrestricted access to the watercourse causing damage to parts of the bank (**Photos 24 & 25**).

It would be worthwhile talking to the grazier about options for reducing grazing pressure as well as fencing this part of the meadow to restrict access for the horses to the river, which will help protect the banks from erosion. There are a few alternatives for providing drinking water for the horses e.g. solar powered pump or pasture pump connecting to a water trough or fencing a designated drinking area in the backwater / pond that extends out from the riparian corridor into the field.

Again, there should be opportunities available to fund this work through the Countryside Stewardship Capital Grants Scheme, options might include:

- FG1: Fencing @ £4.00 per metre
- LV5: Pasture pumps and associated pipework @ £220 per pump

Further advice and details of how to apply are available through Karen Davis, the local Catchment Sensitive Farming Officer.

Photo 24: Overgrazed section of meadow. Consider options for fencing and reducing grazing pressure.



Photo 25: Heavily poached bank contributing sediment pollution.



At the very top of the upper beat (51°28'05"N , 001°26'05"W) there is a discharge pipe (*Permit No: CNTD.0032*) from Thames Water's East Shefford Sewage Treatment Works. 2020 data, from the Rivers Trust, indicates that this sewer storm overflow spilled **121 times** for a total of **2753 hours** i.e. equivalent to sewage flowing into the river for four months of the year, day and night, continuously.

Photo 26: Thames Water storm overflow at upper limit of fishery



Storm overflows, like this one, are designed to allow exceptional discharge of sewage to rivers at times of heavy rainfall when the sheer volume of water threatens the capacity of a sewage treatment works.

A specific issue for chalk streams, like the Lambourn, is groundwater infiltration to sewer networks, which means in wet winters, when groundwater levels are high, groundwater enters the sewers leading to extended operation of storm overflows. These spills can lead to a multitude of effects: risk to human health arising from bacteria and viruses; reduction in oxygen and therefore damage to the ecology; nutrient enrichment. All of this coincides with a particularly sensitive time for river ecology, in early spring, when groundwater levels are high and fish have recently finished spawning.

There are 3 fundamental factors that collectively contribute to the ecological health of chalk-streams: 1. water quantity (the naturalness of

the flow regime), 2. water quality (how clean the water is) and 3. physical habitat quality (the physical shape of the river).

These three factors have been described as the ‘trinity of ecological health’ in a nationwide [chalk stream restoration strategy](#) published in 2021 by the Catchment Based Approach (CaBA).

The River Lambourn is fortunate and relatively unique in having a ‘near natural’ flow regime due to the absence of any significant demand for abstraction from the chalk aquifer in the upper catchment. So, it is known that there is good flow (water quality) and as shown in this report there is good, well managed, habitat (physical habitat quality) in some places but without clean water, the overall health of the river is compromised.

In addition to keeping an eye on storm overflow data for the East Shefford STW (<https://www.therivertrust.org/key-issues/sewage-in-rivers>) it would be worth recording visual assessments and reporting these to the EA incident hotline (0800 80 70 60) when the overflow is seen to be particularly bad. Similarly, it would be a good idea to talk to Action for the River Kennet (ARK) about ‘Riverfly Monitoring’ which is a citizen science project using regular assessments of riverfly populations as a biological indicator of water quality and a potential warning signal for otherwise undetected pollution incidents. ARK have a team of trained volunteers and should be able to help establish a monitoring site at Weston Farm.

The other issue noticeable on the upper beat was the presence of the non-native and invasive water fern, *Azolla filiculoides* in the river margins. The North American weevil, *Stenopelmus rufinasus* has been employed on the Lambourn as a biological control but the fishery should monitor the spread of *Azolla* and contact the Environment Agency if they are concerned about further encroachment.

5.0. Recommendations

In order for the resident brown trout population in the Lambourn at Weston Farm to reach its full potential in a rich and biodiverse habitat, the following actions are recommended:

5.1. Physical Habitat - Management & Enhancement

- Continue to employ a 'light touch' to the management of the fishery where possible, e.g. leave fallen trees in the river. If a tree does fall in a place where it might cause a problem, move it into a more favourable position and secure it with posts and wire or sisal rope to retain the ecological (and fishery) benefit.
- Encourage lush, thick fringes, ensuring cover for small fish and invertebrates at the river's edge.
- Continue to manage in-stream weed growth in a light touch, sensitive manner.
- Explore possibilities of adding large woody material, tree limbs or whole trees ("big and bold") and brushwood berms, as described in this report. This should help encourage variation in flow and depth. When building these, the general rule is not to encroach more than a third of the existing channel width. **Photos 27-31** in the appendix show some examples of the type of structures that could be installed. Many of these structures will require a flood risk activity permit from the EA.
- Keep an eye out for invasive non-native species, particularly Himalayan balsam and *Azolla*. Contact the Environment Agency or Action for the River Kennet for assistance.
- Plant some trees along the edge of the meadow on the upper beat ($51^{\circ}27'49''N$, $001^{\circ}25'52''W$) to increase future habitat resilience and diversity. Consider species like Black Poplar, Alder and Willows.
- Contact the neighbouring riparian owners at Welford Park to find out more information about the potential impoundment from the structures described in the SSSI Restoration Plan and explore the opportunity to jointly talk to the Environment Agency. WTT can share contact details for the EA.
- Explore options with WTT and Action for the River Kennet for a restoration project in the dredged section of the lower beat, downstream of the mill ($51^{\circ}27'39''N$, $001^{\circ}25'22''W$).

5.2. Water Quantity

- Ensure a healthy flow of water is maintained to the mill leat on the lower beat, via the hatches at the mill pool, to maximise the good quality habitat in the reach running down to Marsh Cottage.

- Investigate the breached structure seen in **Photo 11** (51°27'39"N , 001°25'20"W) on the lower beat and identify best solutions for repairing the breach. Natural England might have a record of previous works and could help provide funding to contribute towards the repair. WTT will share contact details.

5.3. Water Quality

- Talk to the owners of the farm track (NGR: SU 40381 73638) off the Newbury Road about interventions to prevent sediment pollution. Contact Karen Davis at Catchment Sensitive Farming for advice and help with funding. WTT will share contact details.
- Explore options for fencing and managing the grazing pressure in the meadow at the top of the upper beat. Again, Catchment Sensitive Farming can help with funding and advice.
- Continue to monitor and report the storm overflow from the East Shefford STW and contact Action for the River Kennet regarding options for volunteers to help with riverfly monitoring. WTT will share contact details.

6.0. Making It Happen

Further assistance from the Wild Trout Trust is available in the form of:

- Help obtaining the necessary consents for carrying out in-stream works, from either the EA (depending upon whether the river is designated Main River or not).
- A practical visit, which involves a visit from a WTT Conservation Officer to demonstrate the habitat improvement techniques outlined above. This enables recipients to obtain on the ground training in the appropriate use of conservation techniques and materials, including Health & Safety, equipment, and requirements. This will then give projects the strongest possible start, leading to successful completion of aims and objectives. Recipients will be expected to cover travel expenses of the WTT attendees.

The WTT website library has a wide range of free materials in video and PDF format on habitat management and improvement:
<http://www.wildtrout.org/content/library>

The Wild Trout Trust has also produced a 70 minute DVD called 'Rivers: Working for Wild Trout' which graphically illustrates the challenges of managing river habitat for wild trout, with examples of good and poor habitat and practical demonstrations of habitat improvement. Additional sections of film cover key topics in greater depth, such as woody debris, enhancing fish stocks and managing invasive species.

The DVD is available to buy for £10.00 from our website shop
<https://www.wildtrout.org/shop/products/rivers-working-for-wild-trout-dvd> or by calling the WTT office on 02392 570985.

Acknowledgement

The Wild Trout Trust would like to thank the Environment Agency for their continued support of the advisory visit service.

Disclaimer

This report is produced for guidance; no liability or responsibility for any loss or damage can be accepted by the Wild Trout Trust as a result of any other person, company or organisation acting, or refraining from acting upon guidance made in this report.

Legal permissions must be sought before commencing work on site. These are not limited to landowner permissions but will also involve regulatory authorities and any other relevant bodies or stakeholders. Alongside permissions, risk assessment and adhering to health and safety legislation and guidance is also an essential component of any interventions or activities in and around your fishery.

Appendix:



Photo 27: Hinged hazel on the River Shalbourne. Hazel, small willows and small alders can be hinged into a river, creating diversity of flow and instream cover for fish. The trees are hinged in a similar manner to hedge laying, where the tree is partially cut through at the base and laid into the margins. Chestnut stakes and fencing wire (or sisal rope) can be used to secure the trees in place. Willow will survive perfectly well even with 70% of the branches submerged; however, hazel and alder should be laid to retain much of the structure above water level.



Photo 28: Another example of a tree successfully hinged into the margins of a river to improve habitat diversity.



Photo 29: Simple flow deflector on another chalk stream, the Dun: these help to diversify flow regimes and scour pools which helps to clean gravels for spawning.

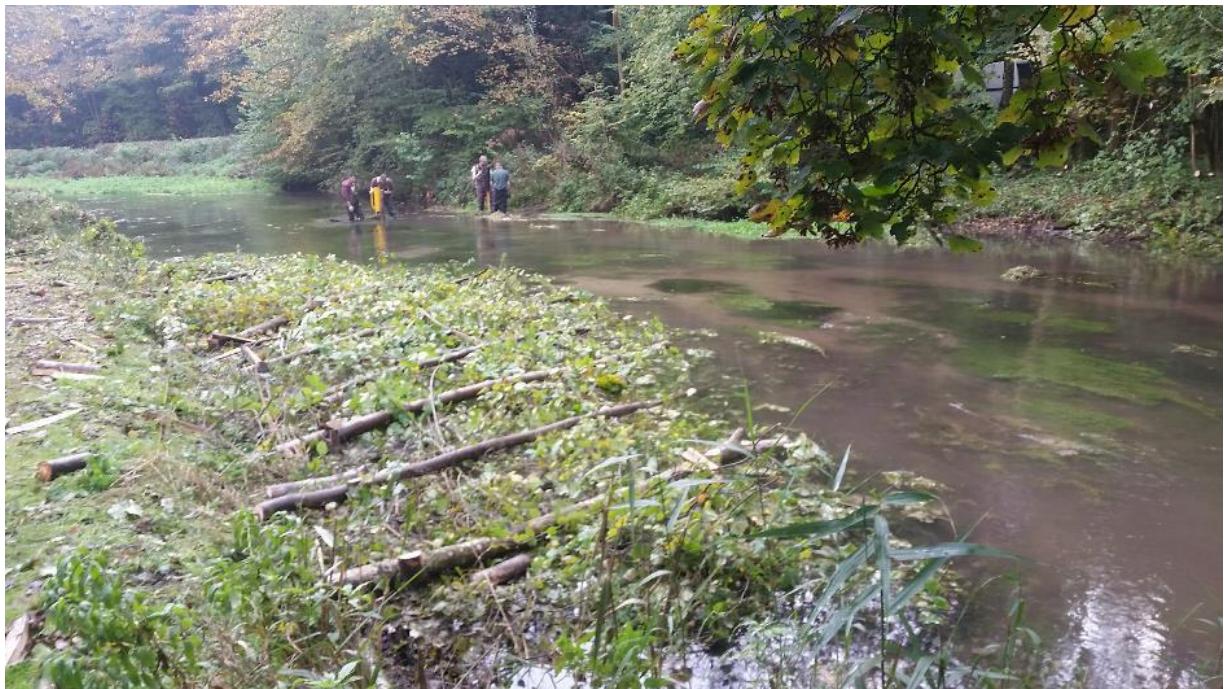


Photo 30: Brushwood mattress in another chalkstream, the Dever, on an overwide section to allow marginal plants to encroach, pinching the river.



Photo 31: Large woody material in the form of a living willow deflector, assisting with flow variations, gravel cleaning and cover for fish from predators.



Photo 32: Gravel added to the channel to restore a historically dredged section of the River Shalbourne.