



MANAGEMENT & MAINTENANCE PLAN

LIVING WANDLE CATCHMENT PLAN PROJECT

Introduction

Through the Living Wandle Landscape Partnership Scheme (LWLPS), the Wandle Trust delivered the Catchment Plan project, which aimed to start the delivery of the [Wandle Catchment Plan](#), reinvigorating the enthusiasm of the local community and safeguarding the natural heritage of the Wandle chalkstream for the future.

A major part of this project was the delivery of four flagship, river restoration projects between 2014 and 2016 (Figure 1). These were significant projects for the Wandle, restoring the upper reaches to their chalkstream origins and creating habitats for fish spawning, which was previously lacking and believed to be restricting the natural recruitment of brown trout.



LOTTERY FUNDED

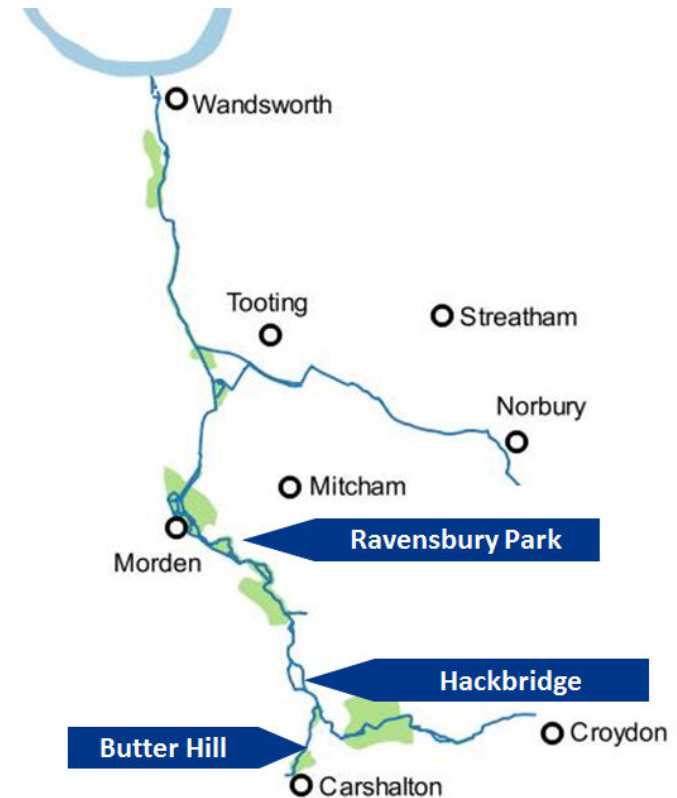


Figure 1: Map showing flagship restoration sites

The Restoration Projects

1. Ravensbury Park: A total of 100 m of river corridor was improved to restore an over-wide, canalised old mill channel into a more natural, channel to provide refuge to fish and other wildlife (see attached plans in Appendix for detailed designs).

Throughout the site, toe boarding was removed and the bank renaturalised to create marginal habitat. A low flow channel was created using faggot bundles and coir rolls with the new banks planted up by local volunteers. Large Woody Material (LWM) was installed to further increase flow diversity. A number of bat hotels and bird boxes were installed in the surrounding green space with volunteers.



Figure 3: Hackbridge Before and After Photos



Figure 2: Ravensbury Park Before and After Photos

2. Hackbridge: Four weirs were removed and 125 m of river narrowed using bioengineering techniques (see attached plans in Appendix for detailed designs). An island was regraded and a backwater created with 250 tonnes of gravel used to enhance geomorphology and habitat. Finally, 6000 plants were planted by local volunteers.

3. Butter Hill: The weir at Butter Hill was reduced in height by 1 m and the fish pass modified to increase efficiency. The length of impounded river was reduced by 150 m and fish passage opened up for 500 m upstream. A total of 500 m of river was narrowed and meandered with a low flow channel, berms, riffles, pools and marginal wetlands created along the length (see attached plans in Appendix for detailed designs). Approximately 300 tonnes of gravel were added to restore geomorphology. Volunteers planted 2000 plants and coppiced trees to enhance light penetration.

4. Hackbridge II – Volunteer-led Restoration: Working closely with the Trust, a team of local volunteers designed and delivered their own small-scale river restoration just downstream of the Hackbridge site. The project narrow 50 m of channel to increase flow by installing two large wood berms by hand which will accumulate silt over time and solidify (see attached plans in Appendix for detailed designs). Approximately 5 tonnes of gravel was added to further improve flow diversity.



Figure 4: Butter Hill Before and After Photos



Figure 5: Hackbridge Volunteer-Led Before and After Photos

Management and Maintenance

Works commenced in 2014 and to ensure the sustainability of the LWLP funded project, a 10 year management and maintenance contribution of £12,500 has been pledged between 2018-2028, although the maintenance of these sites will remain important to the Trust beyond this timeframe. The table below outlines the management and maintenance actions required and how these will be delivered. The maintenance actions and estimated costings on this plan have been put together with advice from a local Biodiversity Officer at Sutton Council, and from the Wild Trout Trust with respect to spawning habitats.

Site	What needs to be maintained/ managed?	What work is involved?	Who will do this?	When and how often?	What resources are required?	££	££/yr	Proof of value and agreement from delivery partner
ALL	Marginal vegetation	Annual strimming of marginal vegetation on banks Selected removal of sedges to allow a greater diversity of plants to grow	Wandle Trust staff and volunteers	Annually ahead of spring	Wandle Trust to organise a volunteer day in March Strimmer and PPE	1 staff day £250 16 vol hours (unskilled) £114 8 vol hours strimming (skilled) £171 = £535/yr	£535.00	Volunteer sign in sheets and photos from these future events
ALL	Litter removal	Annual event to remove large rubbish from in stream Set up River Guardians to undertake regular litter picks along each stretch	Wandle Trust staff and volunteers	Annual event Quarterly litter picks by volunteer guardians	Wandle Trust to organise cleanup events each year Cleanup equipment and PPE	Ravensbury Park biannual Cleanup - 140 vol hours (unskilled) £1000 Carshalton to Hackbridge annual Cleanup – 160 vol hours (unskilled) £1142 = £1642/yr	£1,642.00	Volunteer sign in sheets and photos from these future events

ALL	Invasive non-native species (INNS)	Continued survey checks and if required, manual removal, of Himalayan balsam and floating pennywort Continued watching brief for other INNS species	Wandle Trust staff and volunteers	Annual survey and check Manual removal of INNS throughout year	Hit Squad PPE	24 vol hours (skilled) = £514/yr	£514	INNS Hit Squad reports to Trust and volunteer timesheets for future work.
Butter Hill/Hackbridge	Spawning gravels	Prepare gravels for potential trout spawning Break up any compaction of the gravel Remove as much of the accumulated silt as possible	Wandle Trust staff and volunteers	Annually, early September		1 staff day £250 24 untrained vol hours £171 = £421/yr	£421.00	Volunteer sign in sheets and photos from these future events
ALL	Structural check	Check all installed structures (berms, new banks etc) are secure and functioning. If significant work is required, the Trust will apply for funding to address these.	Wandle Trust staff and volunteers	Annually, throughout year	Staff time	1/16 th staff day per site, twice a year. £15.6 * 4 * 2 = £124/yr	£124.00	Future WT staff update logs

ALL	Review of Management and Maintenance Plan		Wandle Trust Staff	Every 5 years				
							Total Annual Cost	£3236
							Total 10 Year Cost	£32,360