Biannual newsletter of the Wessex Chalk Stream & Rivers Trust

Wessex Chalk Stream & Rivers Trust

THE WESSEX WATERWAY

Issue 8 | January 2019

In this issue

WELCOME

Dear Supporters,

At last we have some real winter weather, and perhaps by the time you read this newsletter spring will have arrived. Last weekend I was walking in the snow by the River Test, with snow drops pushing up through the undergrowth in the wood by the river. Another three months and the meadows will be covered in wild flowers and, with luck, mayfly will be popping to the surface of the river – always something to look forward to in the tail end of winter.

Since our last newsletter Martijn Antheunisse, our new Director, has got his feet firmly under the desk – and that desk is in our new offices near Salisbury. We have had a very busy winter putting together numerous projects which we will deliver in 2019 and 2020. Some, particularly under the government's Water Environment Grant scheme, have been delayed by the exodus of civil servants into Brexit preparation – but we will hear soon whether we have been successful with our three applications for major projects in the Wessex area.

On top of that we have two Heritage Lottery Fund projects in development with our partners, river schemes on the Test and Itchen funded by Southern Water, various eel enhancement projects and many others – some described in the following pages, others yet to come. Wessex Chalk Stream & Rivers Trust is growing and delivering more each year to enhance our rivers, their flood plains and the creatures that live in them.

Thank you for supporting us and please keep at it. We have been successful in our core fundraising this year – but it is an annual struggle! Our sales of donated fishing days on the chalk streams have been very popular in recent years. Many thanks to those of you who have so kindly given us days. For others, you can help us either by donating a fishing day or buying one.

George Seligman
Chair of Trustees

CONTENTS

Director's foreword

The articles in this newsletter only cover a very small part of all the work undertaken by staff and key partners of the Trust. The newest recruits (including myself) have found their feet and we have been involved in numerous projects and activities across Wessex with a wide-ranging focus: water quantity and water quality improvements, habitat restoration and education in the last six months.

Behind the screen the Trust is further developing to make us future-ready and enable us to make the most of the opportunities out there. For the first time in the history of the Trust we have moved into an office of our own, with all benefits attached. If you have missed our opening party last year, feel free to drop in for a tour any time!

The water situation
Although there was a significant lack of rain last summer and autumn, this has not lead to droughts and water shortages in our chalk streams yet. A 'mock' drought exercise undertaken by Southern Water on the Test & Itchen to test the drought permit process would have been real when the new licence agreements to abstract water are signed off eventually. We have the wet winter last year to thank for that.

The situation in the beginning of 2019 is not so positive. The aquifers have just started slowly to fill up again, but we need a lot more rain or snow to build a buffer to protect us from a dry summer. The Test especially requires more than the long-term average amount of precipitation in the catchment to get into a healthy water resource situation.

Be sure that we will closely monitor the developments this year and act when necessary,

Martijn Antheunisse
Director

River Meon Riverfly Report Completed

Final edits have been made to the Meon Catchment Invertebrate Fingerprinting study and the report has now been issued in print and electronic formats.

Andy Blincow, WCSRT

The River Meon Catchment Invertebrate Fingerprinting (CIF) study is a partnership project between the WCSRT, Test & Itchen Association and South Downs National Park Authority with the objective of identifying the current and recent pressures facing the River Meon. The Meon report is a continuation of previous studies undertaken within the Wessex region, including those on the Hampshire Avon and Test & Itchen. The CIF studies examine the responses of aquatic invertebrate communities to a range of environmental stressors, including; sedimentation, low flow conditions, phosphate pollution, organic pollution, and pesticide pollution.

The River Meon drains a fairly small catchment, covering an area of circa 108 km2 on the eastern extent of WCSRT's operational area. Often referred to as a 'Cinderella river', the Meon is one of Hampshire's several diminutive small chalk streams – lacking the fame and designation but less obviously modified than the larger Test and Itchen.

Although appearing more natural in character, the Meon is still subject to many of the same pressures and invertebrate monitoring is an effective approach to identifying these acting upon the biology of the river.

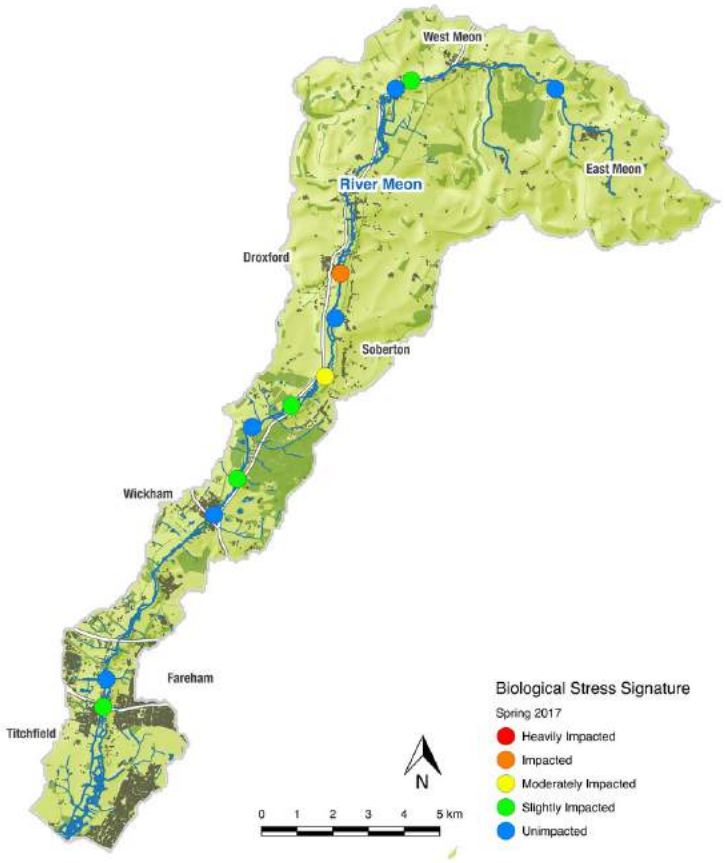
Invertebrate samples were collected at 12 pre-determined sample sites by WCSRT staff and volunteers from the South Downs National Park Authority in spring and autumn 2017. The standard three-minute kick sampling methodology was employed and samples were preserved for identification by Dr. Nick Everall from the Aquascience Consultancy. Invertebrate taxa were identified to species level and subsequent analysis was undertaken using a range of biotic indices. These are used to determine how a range of pressures are impacting upon an invertebrate community. In addition to analysis of the 2017 samples, historic (2002 – 2016) Environment Agency monitoring data from three sites provided by the Solent & South Downs team was also analysed using the same biotic indices, allowing an assessment of trends over this period.

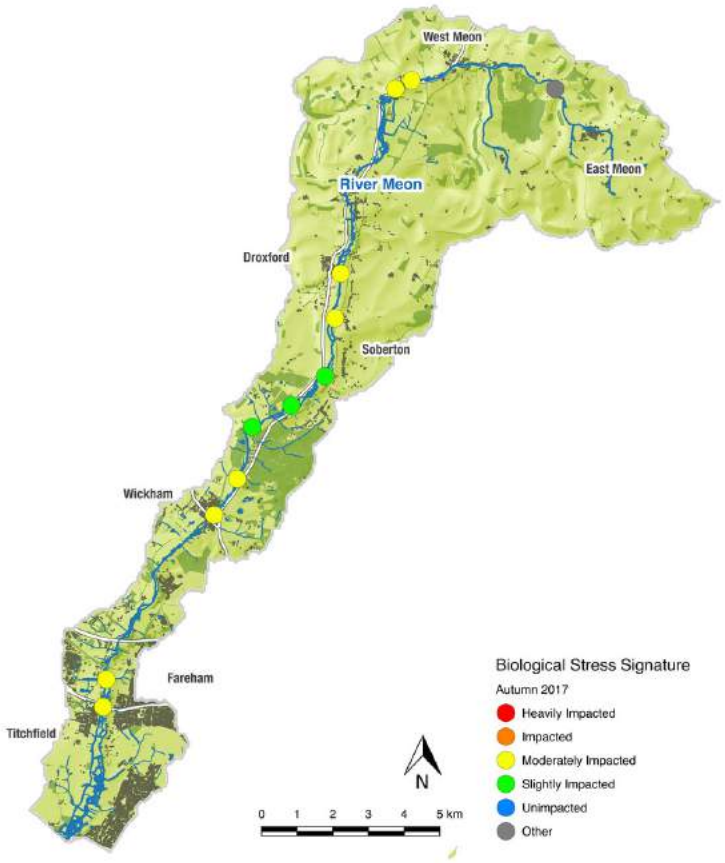
SDNPA volunteers collecting samples on the Meon

Overall, the results from the 2017 Meon data are positive, with the vast majority of sample sites shown to be 'Slightly Impacted' or 'Unimpacted' for most pressures. However, the autumn 2017 data does indicate that the invertebrate communities at over half of sample sites across the catchment were 'Moderately Impacted' by pesticides, with the affected communities distributed from the upper to lower catchment. The three sample points within the upper – middle catchment for which trend analysis of historic EA data was undertaken broadly display a level or increasing trend for all biological indices. This indicates that the investigated pressures acting upon the invertebrate communities within the Meon have decreased or remained stable since the early 2000s.

Whilst useful as a stand-along study, it is anticipated that the CIF report will act as a 'benchmark', providing a baseline against which further invertebrate monitoring by volunteers such as those of the South Downs National Park Association can be assessed. Regular monitoring of our rivers is essential for identifying the pressures acting upon their ecology, allowing targeting of projects to address these issues, and monitoring the success of projects post completion.

To download a copy of the Meon CIF Report or to view interpretation maps produced for the previous Test & Itchen and Hampshire Avon CIF projects, please visit our website: ***www.wcsrt.org.uk/science****.*



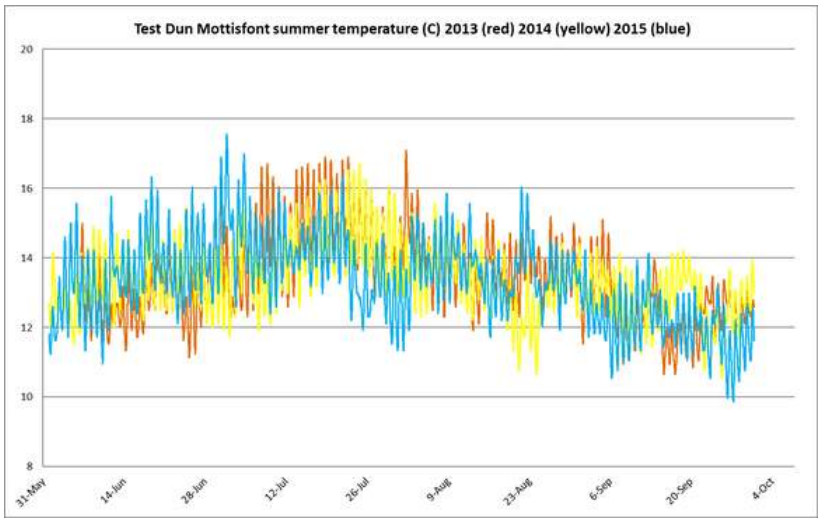


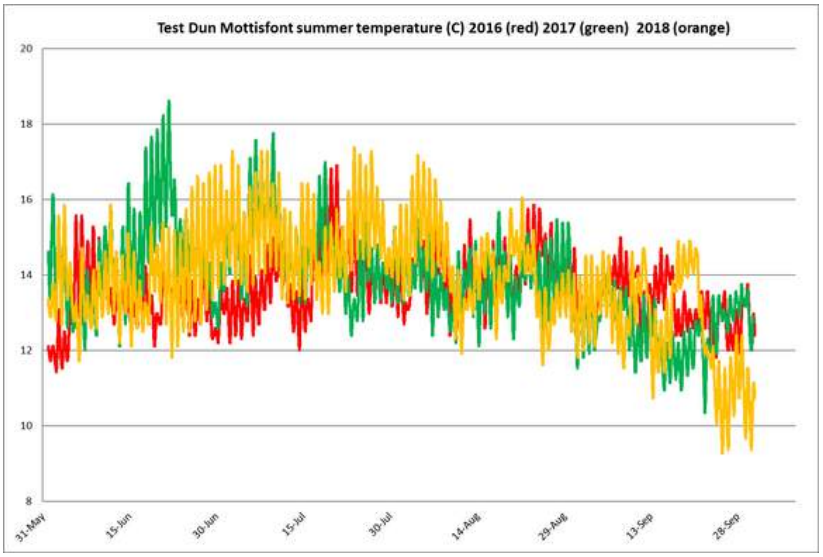
Maps of biological stress signature for pesticides from the spring and autumn 2017 invertebrate samples. Please refer to the full report for full-size maps and interpretation of results.

River Temperature Monitoring Update

WCSRT has now completed eight years of 15-minute river temperature recording at numerous sites, amassing over 1,800,000 measurements through major droughts, floods, freeze-ups and heat waves.

Jon Bass, WCSRT





Annual river temperature patterns for the River Dun near Mottisfont

Recent interesting highlights include the apparent impact of strong groundwater flows reducing summer warming in June 2018 throughout the Wessex area. An underlying message here, perhaps?

Moreover, the tracking of within-gravel winter temperatures (2017-18) reassuring us that the required egg-incubation conditions for our local salmon and sea trout were not compromised, though that was a comparatively cold winter. In future it will be possible to calculate egg-incubation temperatures experienced in a particular year from the relationship between within-gravel temperature and the overlaying river temperature regime at a site. This could inform attempts to offset and delay the impacts of climate warming.

The charts on the left show an example of annual river temperature patterns for the River Dun near Mottisfont. This site consistently displays the lowest summer temperatures each year when compared with river channels of similar size throughout our region. Why? That's another question for the future!

Full summer data for each monitoring site is now available on our website: ***www.wcsrt.org.uk/all-data*** *and currently we are exploring more user-friendly ways to display river site summaries, particularly for the use of the fisheries kindly hosting the WCSRT loggers.*

Ripley Brook - An Ideal Candidate for Holistic Restoration

Liam Reynolds, WCSRT

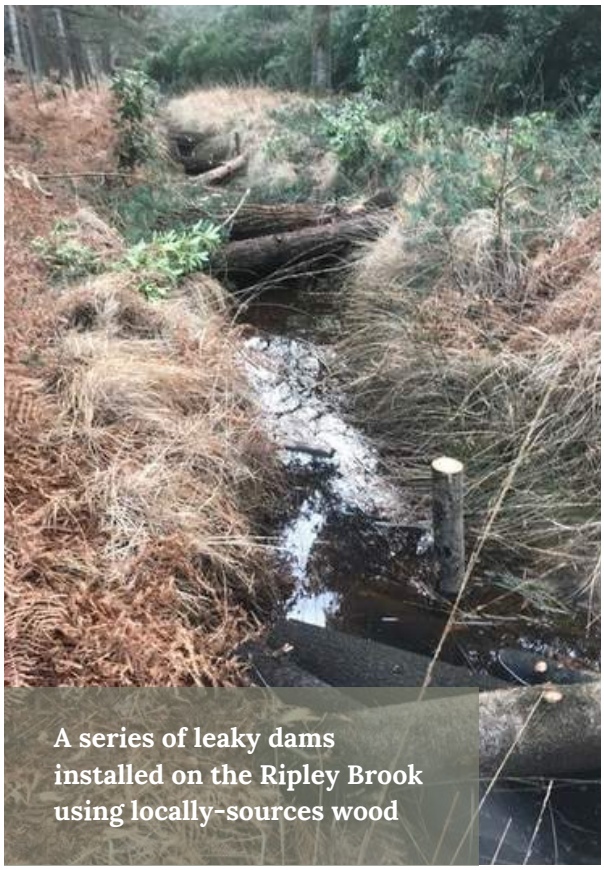
WCSRT, in partnership with a wide range of stakeholders, have implemented a suite of joined-up restoration projects up and down the Ripley Brook, a tributary of the River Avon, since autumn 2017.

Holistic partnership working is something we advocate wholeheartedly at the Trust, but like river connectivity, partnerships are generally perceived as a single process. For example, rivers are often viewed as only being connected laterally (i.e. flooding), forgetting three of the four fundamental principles; longitudinal (i.e. upstream migration), vertical (i.e. groundwater) and temporal (i.e. winterbournes) connectivity. Similarly, partnerships are generally viewed in the conservation industry as collaborations between organisations. The Ripley Brook project tells a different story.

In November 2017 the WCSRT commissioned a fluvial geomorphological audit of the entire Ripley Brook in response to concerns surrounding the health of fish and invertebrate communities. The report identified several issues and allowed the trust to develop bespoke projects to try to improve water quality, restore in-channel habitats and reduce local flood risks. Above and beyond this, the report provided a baseline engagement tool to share with local stakeholders. Following several site visits with a large proportion of riparian owners and extensive communication with the local parishioners, we managed to get our first project agreed just five months later in April 2018.

This first project was an EA-funded habitat enhancement project that aimed to mitigate the impacts of an old quarry operation upstream. The discharge from the quarry was perceived to be causing concretion of the river bed due to high aluminium concentrations. However, the outputs of the report, in combination with wider expert consultation, concluded that concretion is a natural process in the iron-rich, highly acidic catchment. Our attention therefore turned to reinstating natural processes by increasing flow diversity and reducing the dense rhododendron canopy to promote macrophyte growth and reduce concretion potential.

A newly-constructed streamside berm on the Ripley Brook



A series of leaky dams installed on the Ripley Brook using locally-sources wood

The NFM dream team

As reported in our last newsletter, this aspect of the project aimed to improve 0.5 km of in-channel habitat over a week in October 2018. However, with support from the Wild Trout Trust and our trusted contractors, the enhanced reach increased to 0.75 km, which now consists of 25 in-channel woody habitat structures. Feedback from the scheme has been very positive and we are now hoping to extend the project to incorporate a further 0.5 km directly downstream. In addition, before the project commenced we undertook electrofishing and invertebrate sampling throughout the 0.75 km stretch and are now planning to return in July 2019 to assess the benefits of the project.

I started this article with a reference to holistic partnerships and you're probably wondering how it all fits together. Following the guarantee of funding for the restoration project, we started looking to build momentum and improve Ripley Brook at the catchment scale. First, we spoke to the community to understand their priorities, and the overwhelming response was 'flooding'. Their views coincided with that of local authorities, landowners and the EA so we instinctively started looking to establish a Natural Flood Management (NFM) programme. Luck was on our side and we soon managed to secure a small amount of funding from a landowner and the EA to deliver a bespoke ditch blocking project in the upper catchment.

Despite funding being comparatively low in relation to similar NFM projects, our ambitions were high. During the last week of November, the WCSRT, in collaboration with the Wild Trout Trust and Wiltshire Wildlife Trust, installed 52 leaky dams throughout 550 m of forestry ditches. Furthermore, we wanted to show the value of this type of work, particularly how it can reduce peak flows and therefore decrease flood risk downstream. As such, we invested in water level monitoring equipment which was installed before the project began in the improved 'impact' ditch and in a nearby unimproved 'control' ditch. In spring 2019 data will be extracted from the water level monitors to assess how the dams have influenced flows and hopefully help us attract further funding.

That said, we've already managed to find further project support and now have funding to undertake a full catchment walkover this winter to identify problematic flow pathways. Using the data collected we will create an online prioritisation map which ourselves and catchment partners will be able to refer to when designing and delivering local mitigation measures. This top to bottom approach, targeting in-channel and out of channel issues with extensive community and stakeholder involvement is what we see as true partnership working, and something we'll continue to advocate.

Ripley Brook NFM Water Level Loggers

As part of the Natural Flood Management pilot study in the Ripley Brook sub-catchment of the Avon we installed several water level loggers to record the effect of the work done in November. These loggers are rather pricy, and therefore we had to be smart in selecting our measuring locations. We installed one logger upstream of the site, another one at the downstream limit of the drainage ditch where we installed leaky dams and the last one at the downstream end of a control ditch running parallel of the 'impacted' ditch.

The loggers measure pressure (and temperature) every five minutes and this was calculated to water levels, corrected for atmospheric pressure.

We have been able to extract the first batch of data covering a month up to first half of December. The data show that the system responds quickly to rainfall events, and there is a lag time for water running through the ditch. Rigorous analysis of a longer timer series over the winter and spring will provide us with more information on the effectiveness of our interventions.

Improving Eel Habitat on the Broadlands Estate

Andy Blincow, WCSRT

In summer 2018, WCSRT, in partnership with the Environment Agency, Broadlands Estate and Marchwood Power delivered a project to restore an element of the historic ditch network and redundant fish farm stews to enhance and create additional eel habitat and to increase connectivity between habitats for the benefit of European Eel.

Under the Eels (England and Wales) Regulations 2009, there is a legislative requirement to protect eels from the adverse impact of abstraction. However, the Environment Agency's assessment of Marchwood Powers Solent abstraction deemed upgrade screening to prevent the entrainment of eels and elvers (i.e. to reduce the risk of eels becoming trapped in pumps and turbines) to not be cost efficient. As an alternative, compensation measures or 'alternative measures' were determined to be most effective, with WCSRT receiving funds from Marchwood Power to deliver benefits to eels, which are deemed to be greater than the adverse impact of the abstraction.

The proposed project required a wealth of permits and permissions before works could proceed, including: an Ordinary Watercourse Consent from Hampshire County Council, an agri-environment agreement derogation from Natural England, and a Water Transfer (Abstraction) Licence from the Environment Agency. In addition, protected species surveys including water vole and breeding bird surveys were undertaken by WCSRT in advance of works to ensure that disturbance of these species was avoided and the county archaeologist was consulted.

In total, the project delivered a total of 145 m of 'new' ditch – relinking the Test carrier to a relict ditch system, restored 770 m of overgrown ditch network through scrub removal and re-excavation, and re-worked five relict fish stews to create approximately 2000 m2 of new wetland habitat. The project is intended to benefit European eel through the creation of new habitat for adult and juvenile eel, whilst also providing new opportunities for other priority species including water vole and potentially southern damselfly.

WCSRT appointed R.J. Bull Environmental Contractors to deliver the main works including wetland creation and re-excavation of a historic water meadow drain. The Broadlands Estate was appointed to undertake ancillary works including scrub clearance and sediment removal from a disused ditch system. Robert Bull and his team were a pleasure to work with – responding quickly to challenges thrown up by the nature of the site. Their input to a revised outflow ramp to allow elver migration into the wetland was invaluable (see photo) and it is hoped the structure is utilised this spring when elvers run in the lower catchments.

The works revealed some interesting insights into the previous management of the river and floodplain. A buried water meadow hatch (estimated turn of the century) was re-exposed in order to provide water to the newly excavated water meadow ditch and much to everyone's relief was found to be in perfect working order. Even the cast iron hatch door was brought back to life with a few gentle taps from a lump hammer! Re-excavation and re-profiling of the abandoned fish stews also revealed the rubber liners installed by Bernard Aldrich in the 1950s. It is hoped that the works completed as part of this project are still benefitting biodiversity in 50 or even 100 years' time.

Additional funding provided by Marchwood Power has allowed WCSRT to undertaken pre-works species monitoring of the stews and ditch network, including electrofishing and water vole surveys. Post-completion monitoring including southern damselfly is scheduled for summer 2019 and this will provide valuable data on the response of species and speed of colonisation following wetland habitat restoration.

Drone photography was provided by Arron Watson of EcoDroneUk who specialises in conservation, ecology, and photogrammetry projects. For more information, please visit his website: www.ecodroneuk.org.

Newly excavated ditch

Wetland eel ramp

Aerial image of the completed wetland

Backwaters Making a Comeback on the Avon

In summer 2018, WCSRT, in partnership with Sopley Mill Weddings, Christchurch Angling Club (CAC) and Avon Roach Project (ARP), created a half acre backwater near Sopley, Hampshire.

Liam Reynolds, WCSRT

Floodplain backwaters, also known as fry-bays, are an important part of a naturally functioning river system. They provide a mosaic of spawning, nursery, refuge and hunting habitat which fulfils the lifecycle requirements of multiple coarse fish species. Unfortunately, in recent centuries the quality and quantity of this valuable habitat has been progressively reduced. Agricultural intensification and drainage interventions for flood relief are the primary culprits. Many rivers have been straightened or realigned to increase farm machinery efficiency or reduce floodplain connectivity to protect property, ultimately decreasing floodplain connectivity.

Fortunately, the WCSRT and our partners were able to obtain funding from the EA to start a project to increase the number of backwaters (and wet woodland) throughout the lower Avon system (Salisbury – Christchurch). Building on the successes of several partners' past projects which created multiple small-scale fry bays, the WCSRT are planning to create several large backwaters each year as an ongoing programme of works. This process started in Autumn 2017 with the development and subsequent creation (summer 2018) of a 0.45 acre permanently connected backwater within a meadow at Sopley Mill.

Once we had been granted capital funding in autumn 2017, CAC volunteered their time to clear the area of several low-quality mature trees and various shrubs. We then mapped the maximum available area available to establish a backwater and proceeded to design and permit the works. Based on several studies assessing the value of floodplain wetland habitats in relation to their environmental variables (i.e. depth), we decided to produce a varied depth profile and assorted tree canopy cover around the backwater. In addition, we did not plant any aquatic plants in the hope that the historic seedbank, perhaps 100+ years old, would re-establish.

Trevor Harrop from ARP inspecting the newly-created backwater habitat

Delivery commenced in September 2018 with a helping hand from Ecolibrium Environmental Contractors. Upon creation of the backwater, the WCSRT, ARP and CAC were back in the water ensuring the entrance/exit was fully secure using some naturalised revetment techniques. Delivery of this project was dependent on the enthusiasm and support provided by all stakeholders, principally the landowner, CAC and ARP.

Annual maintenance of the short connecting channel will be undertaken by CAC volunteers to ensure the backwater's longevity. Furthermore, WCSRT will monitor the site using electrofishing techniques for the next three years as part of the Lower Avon Backwater Monitoring Programme. We are now in discussions to continue programme delivery in 2019 and beyond!

Aerial image of site mid-construction

Sparsholt College Habitat Demonstration Event

WCSRT and the Wild Trout Trust (WTT) teamed-up to deliver an in-stream/riparian management demonstration at Whitchurch on the Upper Test in autumn 2018.

Andy Blincow, WCSRT

This event was a repeat of a similar demonstration delivered for Test & Itchen river keepers in autumn 2016, however this time Sparsholt College provided the willing audience in the form of 20 or so fisheries students. The study site was kindly provided by Richard Maitland, owner of Fulling Mill.

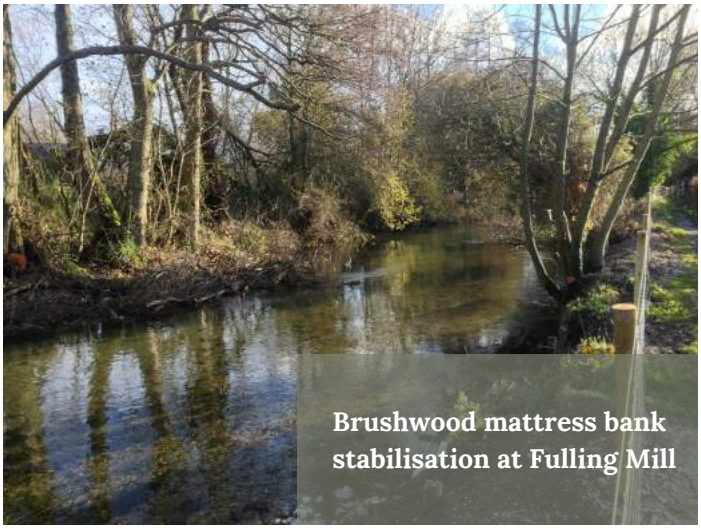
The demonstration event tied-in with footpath and bank stabilisation works planned by the riparian owner. A bespoke flood risk permit application was submitted by WCSRT in advance of works following liaison with Environment Agency and Natural England staff. On site, Mike Blackmore of WTT demonstrated his chainsaw proficiency, felling and hinging bankside trees with pinpoint accuracy. Using the site-won materials WCSRT and Sparsholt staff and students installed approximately 15 in-stream structures within a 400m reach of the river.

The objective of the works was to increase habitat heterogeneity through a combination of channel narrowing and flow deflection. Scour created by new in-stream woody structures will promote the cleaning of gravels where velocity is increased and the creation of depositional areas behind structures where velocity is reduced. The aim is to work with natural processes to create a range of habitats capable of supporting all age classes of fish populations, plus the invertebrate food source upon which they rely.

In addition to delivery of in-channel habitat works, WCSRT and Sparsholt volunteers assisted with the creation of a formalised 'dog-dip' structure at a highly eroded location at the top of the beat. Created entirely from site-won timber and back-filled with chalk and gravels, the structure is intended to encourage responsible members of the public to utilise this area of the river, reducing bank erosion and allowing vegetation establishment across the remainder of the beat.

It is hoped that the event provided an interesting and practical insight into a sympathetic approach to chalk stream management and restoration which can be taken forward by the eager Sparsholt students as they graduate into the world of fishery management.

In addition to those mentioned above, WCSRT would like to thank Lucie Follett for providing much appreciated refreshments to all staff and volunteers and the keeper Mark Burns for his efforts.



Brushwood mattress bank stabilisation at Fulling Mill

Large locally-sourced wood pinned to the river bank

Southern Water Takes a Long-term View on Single-use Plastics

Sam Underwood, Southern Water

In March 2018, Southern Water published its Plastics Policy – an industry-leading stance on what became, arguably, the most topical environmental issue of the year. Samuel Underwood, the company's Stakeholder Manager for Hampshire and the Isle of Wight, explains what the company is doing in-house and in its communities to reduce reliance on single-use plastics and tackle the issue of microplastics – as part of its mission to protect and improve the environment.

When single-use was named "word of the year 2018" by Collins Dictionary, it was hardly a surprise. Over the year, our newspapers, TV screens and social media feeds have been crammed with stories about animals dying after being entangled in, or eating, plastic in our rivers and seas. Meanwhile, other stories told how plastic was found in various ecosystems, animals and foods – with single-use plastics often identified as the culprit.

But at the end of 2017, before that momentous final episode of Blue Planet II, few of us can claim to have really understood what impact our actions – particularly our use of plastics – were having on a global scale. It was the same in Southern Water too. While our Unflushables campaign continued to highlight the problem of sewer blockages caused by wet wipes and sanitary products, the company had no public position on microplastics – despite being a key link in the "from source to sea" chain.

Although not the source of plastics in the marine environment, we recognise that water companies are a link in the chain and have an opportunity to intervene. While screens at wastewater treatment works are designed to remove large items of debris, such as wet wipes, from the wastewater flows they receive, they are not designed to remove microplastics or nanoplastics such as clothing fibres. This is because the issue of microplastics in wastewater is still not properly understood and, until it is, it is difficult to introduce meaningful regulation or legislation. As a result, there are currently no requirements regarding plastics in treated wastewater or the agricultural fertiliser we return to farmland. Rather than waiting for legislation to catch up with the problem – we're taking an active role in helping better understand the sources of plastic from the wastewater treatment process, its impact on the environment and what we can do about it.

The first step was to get our own house in order, so in March 2018 we published our Plastics Policy. It sets out our commitment to reducing single-use plastics in our offices, our operations, our supply chain and our communities and pledges to fund research and pilot projects for removing microplastics at our sites.

I chair the monthly steering group which oversees the policy and our progress and I'm proud to say that we've achieved a lot already. All our employees were given aluminium water bottles and we're cutting out single-use plastics, where possible, across our business. For example, we're now accepting reusable cups in our cafés and using about 75% fewer disposable coffee cups as a result. We've carried out an audit of our use of plastics and are using the results to set targets for reduction and we're also sponsoring academic studies into plastics in wastewater to help inform and devise potential solutions. We've also rolled out a plastics training programme to raise awareness with colleagues and we're working with our supply chain to encourage them to reduce plastic waste too.

The next step is getting out into our communities to promote simple things people can do such as supporting the Refill water bottle filling campaign. This includes working with the various environmental groups, including the Rivers Trusts, which sit on our region's Catchment Partnerships to devise joint projects and campaigns in the future. Our efforts are a step in the right direction but, of course, a drop in the ocean of the wider problem so it's great to see so many other organisations taking action. The issue of plastics looks daunting because it's bigger than any of us, but it's not bigger than all of us combined.

Microfibres in wastewater – courtesy of Natalie Welden, University of Portsmouth

Sam Underwood handing out aluminium water bottles to Southern Water colleagues

What are microplastics?

Microplastics (MPs) are fragments of plastic smaller than 5 mm in size and are known to be distributed across the globe. Although MPs are a recognised pollutant in marine environments, less attention has been directed towards freshwater ecosystems although this is now changing. This is a welcome development given that an estimated 80% of MP pollution in the ocean comes from land and rivers are one of the dominant pathways for MPs to reach the oceans.

The environmental release of MPs in freshwater environments will occur from a wide variety of sources, including emissions from wastewater treatment plants and from the degradation of larger plastic debris items. Due to the chemical makeup of plastic materials, receiving environments are potentially exposed to a mixture of micro and nano-sized particles, leached additives and subsequent degradation products, which will become bioavailable for a range of plant and animal life. Research clearly shows the ingestion of MPs by aquatic organisms, but the long-term effects of continuous exposures are less well understood.

Bringing Chalk Streams into the Classroom

Vee Moore, WCSRT

2018 was a successful year for chalk stream education with over 700 students participating in our lessons and activities, but we're planning to make 2019 even better. You can help, too by spreading the word about our programmes to your friends and family.

One of WCSRT's key aims is to engage with schools and communities to raise public awareness of chalk streams. The following programmes are aimed at primary schools in particular and lend themselves to Science and Geography in both primary key stages, particularly to the study of water, local rivers and streams and their freshwater habitats and wildlife.

- **Story of Chalk Streams** - A classroom-based study of the history of chalk streams and their relevance in the modern world.
- **Mayfly in the Classroom** - A hands-on study of mayflies, which enables children to learn about their life cycles and how they fit into the wider chalk stream ecosystem.
- **Field-based learning** - With programmes such as Trout Grow on Trees and the Winchester College River Project, we are providing boots-in-the-water experiences for children.

Please visit our website for more information: ***www.wcsrt.org.uk/education*** *or contact Vee Moore, Education Officer at* ***vee@wcsrt.org.uk*** *if you know of anyone who's like to get involved.*

INTERNATIONAL YEAR OF THE SALMON

International Year of the Salmon is here

England and Wales have joined countries across the Northern Hemisphere to launch the International Year of the Salmon (IYS) 2019, a North Atlantic Salmon Conservation Organization and North Pacific Anadromous Fish Commission initiative to support the conservation and restoration of wild salmon species.

Wild Atlantic salmon are one of our most iconic species and a vital indicator of healthy aquatic environments. Their epic migration is one of nature's greatest stories, swimming 1000s of km from home rivers to Northern Hemisphere oceans and back again. A rich cultural history has ensued, where people's lives and ancestries have been shaped by their interactions with salmon.

However, Atlantic salmon are in a perilous state in their marine and freshwater environments. This is due to environmental change and human activities. IYS will bring people together to share knowledge, stimulate investment in research and raise public awareness to take appropriate action for salmon. We have an opportunity to save not just salmon and their environments for future generations, but also the communities and cultures that depend on them.

WCSRT will be running various events and outreach activities throughout the year that will seek to improve the abundance of this iconic fish species. These will be listed on the Events page of the website: ***yearofthesalmon.org****. We have a global issue, but if we all act locally, our combined efforts will make a big difference.*

Fuelling Young People's Passion for Freshwater Science

Josef Amin

In November 2018, I had the pleasure of working alongside WCSRT as their first work experience student. I spent just under two weeks with the Trust, working in their new office and out on the river banks.

A number of days were spent delivering small scale projects on the Nadder and Upper Test. The work was hard but so rewarding. We were seeing fish using the newly-installed brush deflectors for cover within minutes after they were put in. Contributing to the future of these precious streams in a positive way and working in such a beautiful environment left me in high spirits.

I worked on a Natural Flood Management project in Ripley, programming and installing data loggers which will record the depth of water as it rises in winter flows. This will help WCSRT gain a better understanding of the impacts of the work to be undertaken. A site visit to an urban stream in the middle of Southampton revealed a totally different side to the broad range of projects undertaken by the Trust. This project is still very much in the planning stages, but it was exciting to discuss the areas for improvement on the stream, with the added dimension of being able to involve and engage the local community in education and wellbeing benefits.

When not out on the rivers, I worked in the office, classifying invertebrate samples to assess the water quality of a number of sites at Ripley. I am sharing the skills I learnt from this with a local conservation project in West Sussex, to enable us to assess our water quality more accurately. I attended a number of meetings, including one with an artist working to produce an educational interpretation board for the public.

The team shared their knowledge of ecology and river management and I was able to appreciate many different aspects of the work, experiencing the breadth of projects the Trust undertakes. Their areas of expertise overlap and complement each other, enabling them to work together effectively on projects, drawing on each other's knowledge to deliver the best results.

The time I spent working with the Trust has given me greater understanding of the opportunities available working in conservation, and has definitely spurred me on to continue to develop my passion at university and beyond.

Thank you WCSRT!

Josef sorting invertebrate samples in the lab

Josef helping out with large wood installation at Fulling Mill

Our new office

In September last year Martijn picked up the keys to WCSRT's first office in Stratford-sub-Castle, just outside Salisbury. Not only it is easily accessible to all five WCSRT staff, it is perfectly situated - just 50 m from the River Avon.

On 15 November last year we organized a party to celebrate the office opening – this was a great success! We were supported by trustees, founder and life members, friends and colleagues from government agencies, contractors and other charities alike. It was a great opportunity to show off our new working space. We now have space to work but to also store the trust's equipment that was accumulating in most of the staff's sheds and garages!

WCSRT wants to thank Tim Sykes from the Environment Agency for very kindly donating part of his award money from his 2018 Practical Conservation Award he received last year from the Vitacress Conservation Trust. Tim asked us to use his donation for the benefit of WCSRT staff. As this coincided with us moving into our new office, we decided to invest in some lovely framed pictures to decorate our office and some real plants to improve indoor air quality for the team.

The office is manned most of the time by some or all of the WCSRT team and you would be more than welcome to pop in if you are ever passing.

Our new office building

Martijn hard at work in his second home

Sale of fishing days 2019

Last year's sale of fishing raised over £6,000. We were lucky enough to receive some very generous donations of days – many on stretches of river that could not normally be accessed by the public. Thank you very much for those who donated fishing last year.

We would like to raise even more this year and have already collected some exciting days – the lots will be on up on our website by mid February. If you would like to donate fishing days to WCSRT to sell in 2019 it would be gratefully appreciated and will help us carry out the very important work on the chalk streams in the Wessex region.

Please email Lee Bush at ***admin@wcsrt.org.uk*** *with details of the days you are happy to donate. Thank you for your support.*

BECOME A SUPPORTER TODAY!

Help us protect and restore the chalk streams and rivers of Wessex. Please complete the supporter's form or download it from our website:

wcsrt.org.uk/ways-to-give

Wessex Chalk Stream & Rivers Trust

Registered charity no: 1130991
Registered company no: 06822819

Unit 5, Deans Farm Buildings
Philips Lane
Stratford-sub-Castle
Salisbury
Wiltshire SP1 3YR