



River Restoration News

Issue 39 September 2011

Working to restore & enhance our rivers

Welcome to the new look, electronic, bi-annual newsletter **now in colour!**

Click on the titles on the right to go to the articles,

A chance to comment

With a huge and increasing amount of river enhancement being carried out by river trusts and similar groups, we asked for an update on their activities. We would like to hear your views on these articles and similar schemes.

Spotlight on Community Groups



Coming together to care for the
Wandle



Supporting river conservation in
Scotland



Adopting the
Thames

You can still keep up to date with important news and events through our monthly bulletin. Join the debate on LinkedIn, Twitter or Facebook, or contact the Centre directly.

Don't forget

The RRC is able to provide an independent source of advice and information.



Partnership in the restoration of
Protected rivers

Adopting the Thames

Thames21 is an environmental charity that has worked with communities for over fifteen years to enhance London's waterways. It's key focus is engaging communities with their local river, canal or even a lake or pond. In recent years **Thames21** has worked with over 8000 volunteers a year, each person contributing towards the enhancement of London's waterways.

This has helped the River Thames in being named among the top ten 'most improved' rivers in England and Wales.

Alice Hall
and
Chris Coode,
Thames 21

Local volunteers clearing litter and Himalayan balsam from the River Ravensbourne restoration scheme in Ladywell Fields, South East London
Photo – Thames21

Riverkeeper Volunteer group

The benefit of long-term engagement with local people is clearly demonstrated by Thames21's Riverkeeper Volunteer group on the River Cray in the London Borough of Bexley. Formed in 2004, initially their focus was to clean-up a river that was badly littered with car tyres, shopping trolleys, scaffolding, and traffic cones amongst many other items.

Having seen the positive impact of their efforts, the Riverkeeper Volunteers were keen to further enhance the wildlife value of this chalk stream. In 2008, the Riverkeeper Volunteer group led by Thames21 worked with Bexley Council, the Environment Agency, FM Conway Ltd and Hadlow College to carry out in-channel enhancement works along the River Cray adjacent to Waterside Gardens in Crayford town centre.

These works transformed a straight channelised section of urban river into a diverse and valuable habitat through the installation of deflectors, riffles and islands. The Thames21 Riverkeeper Volunteer group were actively involved in installing these features. Between them they barrowed 160 tonnes of broken flint gravel into the river as well as helping to install all of the other in-channel features and planting up the new habitat with native species. Although the installation work is complete, the Riverkeeper Volunteer group continues to look after the area. They monitor the waterway and work with Thames21 to carry out riverside management which helps to ensure that this enhanced section remains a valuable habitat.



A volunteer clearing litter from the restoration site on the River Quaggy at Sutcliffe Park
Photo – Thames21

The great merit of this project is the involvement of local people who are really interested in the long term health of the river and therefore help make this restoration work sustainable. However, it is important to also recognise the need for an organisation to be involved which can bring together and harness the enthusiasm of local volunteers – this is a key success of Thames21's work.

Volunteers can also play an important part in helping larger capital restoration projects to succeed. The Ravensbourne catchment in south east London has seen visionary restoration works carried out at Sutcliffe Park and Ladywell Fields. At both of these locations, Thames21 has worked with local volunteers to help maintain the newly restored rivers once the diggers have left and large scale works are finished. Local communities have great potential for supporting the ongoing management and maintenance of rivers – they live in the local area and are motivated to help look after their valuable blue corridor, especially in dense urban areas such as London.

Thames21 would like to see post-restoration management plans produced as part of large capital schemes which will empower and direct volunteers to help maintain restored rivers in the most effective way.

For more information about **Thames21**, contact **Alice Hall** (Thames 21 River Programmes Coordinator)
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Bexley volunteers removing tyres from the Cray in the area of the 106 to Waterside gardens restoration Photo – Thames21



Volunteers installing a planted coir roll in the channel of the River Cray as part of the Waterside Gardens restoration
Photo – Thames21



Supporting river conservation in Scotland

Elizabeth Clements,
RAFTS

RAFTS (the Rivers and Fisheries Trusts of Scotland) represent Scotland's national network of twenty-five rivers and fisheries trusts and foundations. The work of RAFTS members encompasses 90% of Scotland's freshwater.

The organisation has grown from humble beginnings in 2005 to become one of the leading independent freshwater conservation charities in Scotland. The principle objective of RAFTS is to support the conservation and enhancement of native freshwater fish stocks and populations.

Local needs and priorities are varied. RAFTS and its members deliver a range of environmental, educational and scientific projects associated with fish, fisheries, rivers and lochs. These include Sparling surveys in Galloway and the 'Salmon goes to school on the Clyde' project.



Carrying out channel enhancement on the River Peffery

Photo – Marcus Walter/RAFTS

Willow cuttings being planted on the banks of the Peffery

Photo – Marcus Walter/RAFTS



Various trusts participating in a barrier assessment training course

Photo – RAFTS

RAFTS has been successful in identifying opportunities, securing funding and implementing collaborative projects with the Scottish Government, Scottish Natural Heritage and the Scottish Environment Protection Agency (SEPA). The RAFTS network employs over thirty-five full time fisheries managers and biologists around Scotland. The following case study from the Cromarty Firth Fisheries Trust and the Moray Firth Sea Trout project is one example of practical river restoration works being planned and implemented on the ground.



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The Peffery Restoration

A joint Cromarty Firth Fisheries Trust and Moray Firth Sea Trout Project catchment scale restoration initiative

Marcus Walter,
Moray Firth Sea Trout Project

The River Peffery was once a well known sea trout river, but it has been heavily influenced by many years of agricultural modification through drainage. It has become straight, featureless and channelised. Much of its banks are also bereft of natural bankside vegetation cover which severely limits fish and vertebrate populations. The banks have also been heavily dominated in areas by invasive non native species.

The Cromarty Firth Fisheries Trust have completed a variety of surveys of the watercourse over the years. The Wild Trout Trust and the River Restoration Centre visited the site and using existing data and walk over surveys, reports were produced with recommendations for remedial actions. Subsequently a phased approach to a catchment scale restoration project on the River Peffery began.

The aims of the project are:

- 1 Restore the conservation value of the Peffery and its riverside.
- 2 Improve amenity value for the people of Dingwall.
- 3 Restore the sea trout of the Peffery and the habitats that support them.
- 4 Reduce flood risk in Dingwall by restoring more natural river processes.

Collecting Alder saplings

Photo – Marcus Walter/RAFTS

Phase 1: Ground work and preparation

- RAFTS coordinated Invasive Non-Native Plants (INNPS) eradication works funded through SEPA's Water Environment Restoration fund.
- Appointed a BTCV Invasive Species Apprentice.
- Created a demonstration site for the restoration of riparian tree cover (BTCV and Dingwall Environment Group).
- Held demonstration days with the Wild Trout Trust.
- Cleared rubbish and fly tipping from the Dingwall area using volunteer labour.

Phase 2: Work in progress

- Continue to liaise with partners and landowners.
- Continue INNPS eradication works.
- Carry out catchment scale works to restore more natural river form and function.
- Develop amenity value by improving public access.

Planting the potted Alder on the banks of the Peffery
Photo – Marcus Walter/RAFTS

Coming together to care for the Wandle

Bella Davies,
Wandle Trust



Installing coir rolls
Photo – Duncan Soar/
Wandle Trust

In August 2011, the **River Wandle** was named as one of the top ten 'most-improved' rivers in England and Wales.

The River Wandle flows through south London, rising from the chalk of the North Downs in Carshalton and Croydon to join the Thames at Wandsworth. The Wandle currently suffers from a whole host of issues related to its industrial history and urban location. Despite its many challenges, the Wandle provides an important community resource and green space in a densely urban area.

The work of the trust and its most important resource

The Wandle Trust evolved from a local community group formed in the 1990s to become a fully formed charity and rivers trust dedicated to restoring and

maintaining the health of the Wandle and its catchment. Now with over 800,000 people living in the Wandle catchment area, keeping true to roots, the trust delivers much of its work with the local community through a generous pool of volunteers. Although this may appear a great opportunity for 'free labour' this isn't actually the reason for involving volunteers, neither is it true: the cost of organising and running events for large groups of volunteers is higher than you might think.

The primary reason is to engage local people and encourage them to develop a relationship with the Wandle so that they take an interest in 'their patch' and feel a sense of ownership towards the river. The aim of such an approach, as with much guided



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Coir rolls near Hackbridge

Photo – Duncan Soar/Wandle Trust



Instalilling faggots on the Wandle, near to Carshalton

Photo – Bella Davies/Wandle Trust

volunteering, is to encourage longer term stewardship of the local environment. This enables the Wandle Trust to undertake other river improvement work and tackle river related issues. Part of the strategy for encouraging long-term local stewardship of the Wandle is ensuring volunteers have an enjoyable experience; and showing appreciation to volunteers by supplying refreshments and giving thanks and feedback through the trust's website. That's the theory at least: in practice it means that the trust have been donated over 5000 volunteer hours in the past year alone.

The largest volunteer-based activity involves clearing rubbish from the bed and banks of the river once a month, rotating the location between the London Boroughs through which the Wandle flows. The regularity of this event is an important part of its success with, on average, fifty people turning out to each clean-up. Many treasures have been discovered in the river from guns and safes through to the kitchen sink and the inevitable shopping trolleys. The events also offer the chance to socialise and make new friends.



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Putting volunteers at the heart of projects

Over time the trust has realised the added benefit of involving local volunteers and projects have been re-engineered to put volunteers at their heart. One such example is the Trout in the Classroom project which has run for ten years. The project involves providing local schools with bespoke fish tanks and supporting the children to rear brown trout from egg to fry stage, at which point the children enjoy a trip to the Wandle to release their fish. As the project expanded towards involving twenty schools per year, it was restructured to give volunteers a more central role. Volunteers are now paired with a school and provide support throughout the process, giving talks and being on-call to troubleshoot should any problems arise.

Most recently funding streams have focused on delivering the Water Framework Directive. The local community has turned out over a number of weekends to help the trust deliver river improvement and fish easement work that aims to improve the river habitat. This educates volunteers about the importance of morphological and ecological dynamics, fundamental to the design of river restoration schemes.

Undertaking river enhancement work on people's front doorstep means that it's really important to get them involved from an early stage – explaining the reason behind the works and giving them the opportunity to get further involved. Informative posters on site have been very useful and people frequently stop to have a look at the latest development. Such an approach could be seen as time consuming but in an urban area it has been found to be key to a successful project.

Partnership working is beneficial to all parties

Equally important is partnership working and the Wandle Trust is fortunate to work with a variety of other organisations and groups to help improve the river. In fact, the trust undertakes almost everything in partnership with others, whether it's the local community, the Environment Agency, local authorities or other groups interested in rivers such as the Zoological Society of London, London Wildlife Trust or Thames21.

Conclusion

Empowering people on their own patch gives them a glimpse of the bigger picture as well as the encouragement to engage with wider issues far beyond the riverbank. For the 800,000 people who live in our catchment, the Wandle isn't just an urban chalk stream: it's a window on the world. The trust and its volunteers are acting locally but we all still need to think globally.

Volunteers help school children release their brown trout into the Wandle
Both photos this page – Wandle Trust



Partnerships in the Restoration of Protected Rivers

Jenny Wheeldon
Natural England

Salisbury and District Angling Club and Wessex Chalk Stream Project discussing proposed restoration works at West Amesbury.
Photo - Dianne Matthews, Natural England June 2010

Physical habitat degradation of the Site of Special Scientific Interest (SSSI) river network is a complex issue to address, and for many years restoration efforts were restricted to small scale demonstration exercises. However, in 2004, the Government Public Service Agreement target for restoring SSSIs prompted a more strategic approach to the problem.

Guidelines were developed that take a whole-river approach to the planning and delivery of restoration measures, and these create a challenging, long-term approach to reinstating as much natural habitat functionality as possible to benefit the biological community typical of each river. The process for developing a SSSI river restoration plan is summarised in **Figure 1**.

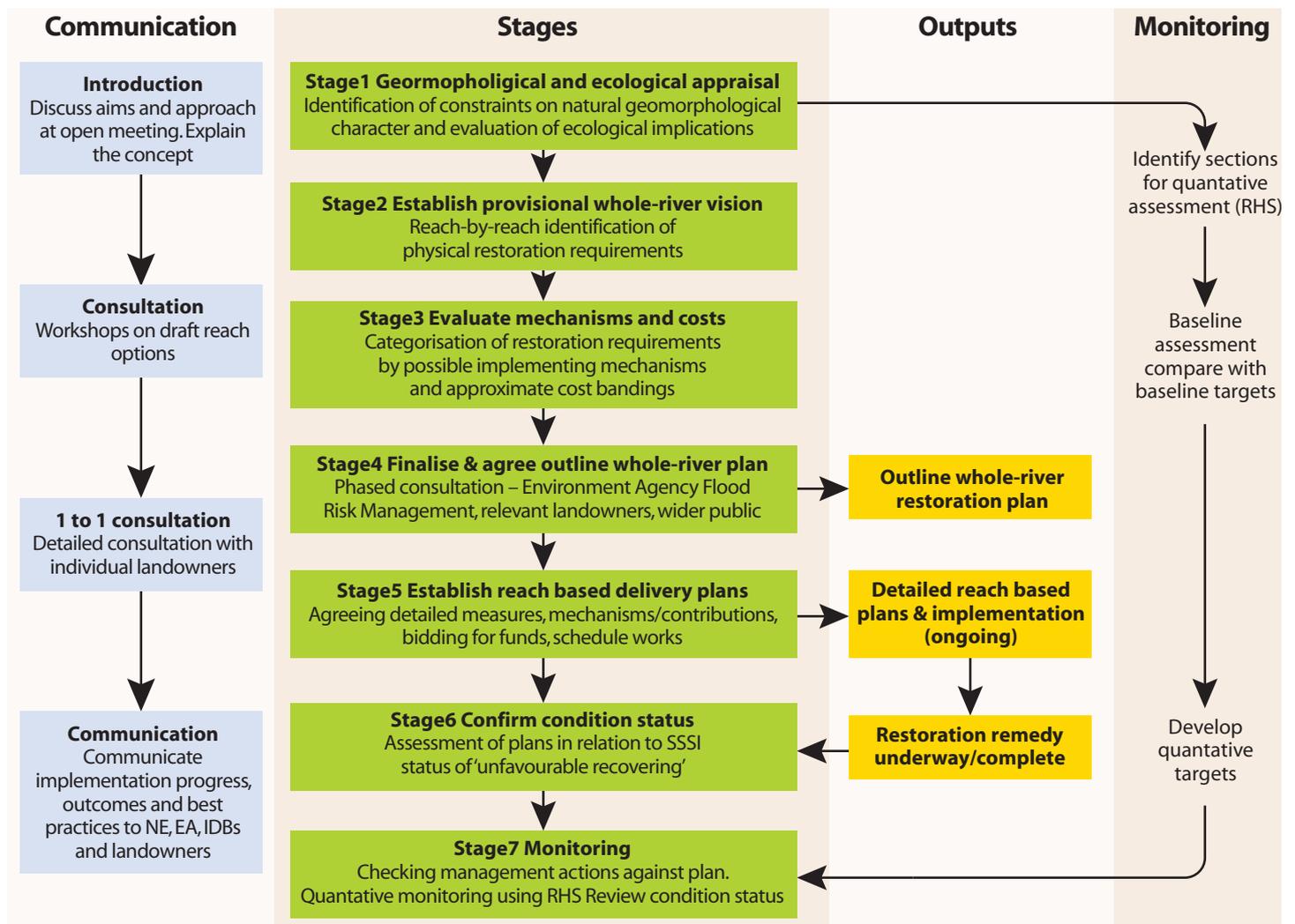


Figure 1 The whole-river restoration planning process

Natural England and the Environment Agency set up a project officer post in 2009 to support the roll-out and implementation of the planning guidelines. The aim is to get the affected SSSI rivers into 'unfavourable recovering' condition in respect of physical habitat. Implementing the restoration plans will also improve the hydromorphological condition of these rivers – one of the key environmental objectives of the Water Framework Directive (WFD).

Ten river SSSIs (approximately 1236 km of river) have gone through the planning process, and four more are close to completion, as shown in **Figure 2**.

The Road Ahead

Initial indications from the SSSI restoration plans are that around 1460 km of SSSI river (58% of the total SSSI network) needs to be restored. Progressing the required programmes of river restoration requires prioritisation and sequencing of actions, costing, and securing delivery mechanisms. Assisted natural recovery is encouraged wherever possible, rather than implementing costly, high-intervention measures. Detailed reach-level plans then need to be produced and agreed with landowners and other users of the river.

Figure 2

Summary of progress with restoration planning and implementation on designated rivers. The map shows not only SSSI rivers but also rivers designated as Special Areas of Conservation (SAC)

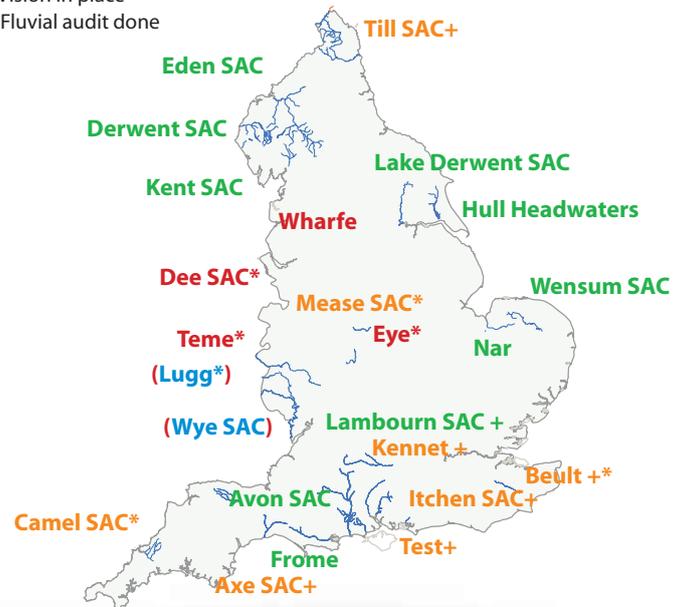
March 2011

Remedy underway
Plans in development
No Action

River units

Dove SAC*
Long Preston SSSI
Hamps & Manifold SSSI

*Vision in place
+Fluvial audit done



Wessex Chalk Stream Project working with volunteers to plant the restoration works at East Chisenbury.
Photo – Ruth Clarricoates, WCSP March 2010



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*Wessex Chalk Stream Project working with volunteers to plant the restoration works at East Chisenbury.
Photo – Ruth Clarricoates, WCSP March 2010*

Restoring the physical habitat of SSSI rivers is a considerable body of on-going work for Natural England, the Environment Agency and a range of partners such as the River Trusts, Wildlife Trusts, the National Trust, National Park Authorities, Forestry Commission, water companies, landowners and land managers.

Partnership working

The restoration planning process aims to build partnerships with a common restoration vision for each river, and the momentum to implement it over long timescales (typically 20 years or more). Ten River Trusts are already actively involved in SSSI restoration planning (e.g., the Wessex Chalk Stream and River Trust on the Avon, Test and Itchen and the Tweed Forum on the Till) and increasingly involved in their implementation (e.g., weir removal on the Mease and the Dove led by the Trent River Trust, and habitat enhancement carried out by the East Yorkshire Chalk Rivers Trust on the Hull Headwaters). The Rivers Eden, Kent and Derwent in Cumbria illustrate the partnership approach being taken.

Restoration plans for the Cumbria rivers were completed in 2010 and these set out a vision of how the rivers would function in a more natural state, with detailed plans suggesting how stretches could

be managed to make them geomorphologically functional, and with prioritised actions and costs. Given that there has been little restoration work on mobile upland rivers in the UK, and the recent major flooding in Cumbria, the project partners agreed the best way forward is to develop demonstration projects. Project officers based at the Eden, Derwent and South Cumbria River Trusts will set up pilot restoration projects using a combination of Environmental Stewardship, the WFD Catchment Restoration fund, Flood Defence Grant-in-Aid, NE and external funding. Other stakeholders are or will be involved in steering the catchment projects and disseminating this approach to river management, including farming and angling interests.

The aim is to put the vision into place, show people how it works in practice, how it impacts both positively and negatively on land management, monitor the effectiveness of the re-naturalisation undertaken and to consider the delivery mechanisms available. At the same time, Natural England is also using opportunities when negotiating Environmental Stewardship schemes to implement river restoration improvements when these fit with the restoration plan recommendations.



*This is South Mill, upstream of the proposed works at West Amesbury – EA, NE, WCSP and S&DAC
Photo - Dianne Matthews, Natural England June 2010*



Partnerships established on SSSI rivers are working together to secure funds, not only from perhaps more obvious budgets such as Woodland Grant Schemes and those used in Cumbria, but also a range of other sources including European programmes. The emergence of the Defra WFD Catchment Restoration Fund in particular presents an excellent opportunity to access funding and build river restoration capacity within the voluntary sector.

Partnership working between Natural England, the Environment Agency and organisations such as the River Trusts, Wildlife Trusts and other non-statutory groups has a critical and increasing role to play in the future implementation of SSSI restoration plans. The SSSI river restoration programme illustrates how a strategic approach to restoration can work and how momentum for major multi-partner restoration works can be built using multiple funding streams.

*Salisbury and District Angling Club, Wessex Chalk Stream Project and one of the landowners discussing proposed restoration works at West Amesbury.
Photo - Dianne Matthews, Natural England June 2010*



More information

For more information on the SSSI river restoration programme please contact

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