



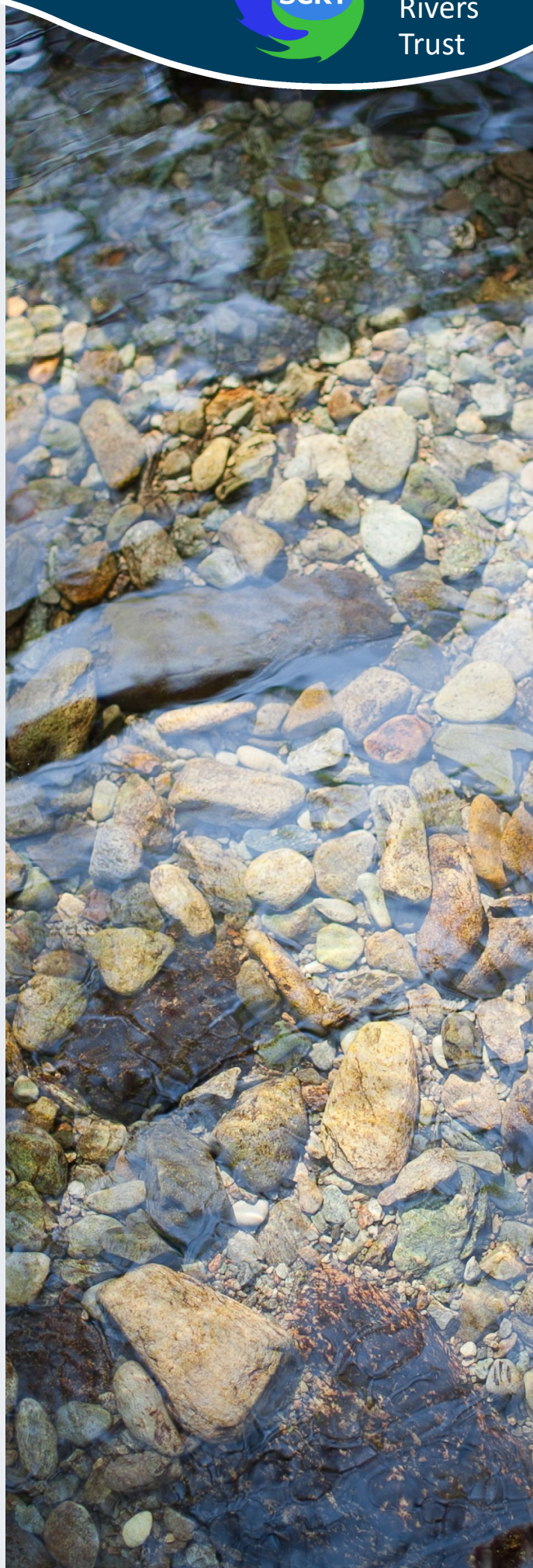
South
Cumbria
Rivers
Trust

South Cumbria Rivers Trust Annual Report 2015



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Chairman's Report

The Catchment-Based Approach (CaBA) promoted by DEFRA 3 years' ago recognised SCRT as the "catchment host" for the rivers of South Cumbria. It provided some funds (and considerable debate within the staff and the Trustees of SCRT) over the years: funds from DEFRA via EA (matched by UU) resulted in over £60k of investment in 24 months. Several River Trust meetings and seminars were held during this time to clarify the action needed by individual catchment hosts. Debate about which catchments were to be funded through SCRT or WCRT provided an unnecessary distraction although the financial queries have now been resolved. Uncertainty over timescales also obfuscated the work.

- As part of the CaBA initiative a literature review was initiated with the Freshwater Biological Association (in mid-2014) to be used as part of the catchment quality analysis. This enabled both SCRT and EA to have access to historic investigations in support of the Water Framework Directive proposals for measures and investigations. The review can be formally updated annually and more references have been forthcoming in late 2015 for incorporation in 2016. Trustees and staff are encouraged to participate in this to improve our information-base. It is anticipated that the appointment of Jayne Wilkinson will be an important source of further information for the review.
- The Cumbrian Catchment Alliance based on the three river catchment hosts (Eden, SCRT and WCRT) was formed in late 2014 and has held several meetings to promote better coordination and effective use of resources to improve the water environments of Cumbria. The proposed secondment of EA staff to SCRT for investigations into septic-tank-related problems and foul-water system misconnections resulting in water quality issues in Windermere have been discussed with EA and UU. This initiative has been delayed by a wave of other initiatives following the December floods.
- The Biffa award grant for the restoration of several rivers in its catchment for the introduction of the endangered freshwater pearl mussel completed its first year and has been renewed for a second year. This project provides £100k to SCRT for each of the three years for practical work. There was serious concern that HMG would curtail all Biffa environmental projects but after considerable lobbying by environmental organisations this decision has been deferred. The project officer, Mike West, has already achieved several major steps forward (observation of glochidial release from pearl mussels in the River

Brathay and discovery of the remains of a previously unknown population in part of the River Kent system).

- Basinghyll: the question surrounding both the fish counter and the site continues to be unresolved as far as the repair of the former and the lease/ownership of the second are concerned. Several meetings between the EA and SCRT in 2015 mean that we are slightly nearer to being able to make use of this resource.
- Ian McMurdo continues to develop the budding Kent Catchment Partnership and SCRT's newly appointed Catchment Planning & Delivery Officer, Jayne Wilkinson, organised the launch of the new partnership in Kendal Town Hall in the second half of the year.
- The Leven catchment received much attention through both Leven Anglers Association and SCRT staff. Work on the River Brathay on a phosphate reduction project centred in Elterwater has been led by Ian McMurdo as a commercial project for United Utilities: this promoted our need to register for VAT. Applications for more reedbed work around Windermere and fish-related improvements in the Leven itself are all in process. Close liaison with United Utilities has been developed for much of the Brathay, Windermere and Leven catchment work. Continuing concern over the Leven and Windermere has led to an embryonic project proposal for better information on the provenance of both brown trout and salmon being developed.
- Les Higgins and Paul Chamberlain on behalf of the Coniston and Crake Catchment Partnership developed a proposal to the Heritage Lottery Fund for support for improvements throughout the catchment in 2014. The proposal was considerably expanded following earlier discussions and a new bid was successful in 2015. The time taken is a reflection of the complexity of both the work and the bid process. Charlotte Hall has been appointed to take this work forward.
- Through the continued efforts of staff (Mike Sturt) and local supporters the Duddon River Association has been increasingly active in 2015-16. There are three rivers needing more attention: the Lickle, Kirkby Pool and Black Beck for which SCRT may need to seek considerable funding in 2016. Problems of low pH continue to dominate the water quality throughout the Duddon catchment. The death of Colin High following a long illness means that this catchment has lost one of its major drivers. We are delighted to welcome Brian White to the board of SCRT on behalf of the Duddon catchment at this meeting. Also from

that area is Lindsay McCrae whose photographic achievements are amazing as you have seen recently.

- The CFINNS initiative has been hosted by SCRT for more than six years with Bekka Corrie-Close leading all three Cumbria catchment initiatives and reporting to a steering group composed of Pete Evoy, Maggie Robinson (NE), Chris Addy (EA) and Roger Sweeting (chair). Bekka produced a summary document of the achievements in order to promote a wider acceptance and to act as a support for future funding for the initiative and has been promoting the use of precautionary measures for the UU new pipeline from Thirlmere to Ennerdale in place of the current abstraction from Ennerdale which will be curtailed for environmental reasons.
- During 2015 Bekka continued to take advantage of considerable funding from the Morecambe Bay Nature Improvement Area (NIA) for the CFINNS work.

In different areas of work associated with the NIA both Mike Sturt (reedbed restoration) and Jen Aldous (habitat improvements on Torver Beck) have continued to use this source of funding to accomplish environmental improvements within the South Cumbria Rivers Catchment.

- Fundraising through Patrons' meetings, stone skimming events (Fell Foot) and other activities continued through 2015, I would especially like to thank Julius Barratt for his valued input and organisation. These occasions are important in terms of SCRT's involvement of the public as well as being enjoyable to participants: the stone skimming competition between international competitors was even more intense than previously!
- Progress with the website was thought to be good early in 2015, but major issues (speed and appearance) have become apparent over the last 6 months and the conclusions agreed by staff and the Executive are that the website should be scrapped and a fresh start made to provide a site that does the work of SCRT justice. This will be done during the first half of 2016.
- The SCRT educational project run by Philippa McMurdo over the last six years has been key to SCRT's outreach to younger people: she is now definitely retiring. This work is fundamental for catchment improvement through awareness-raising and I would again

like to express my sincere thanks to her on behalf of SCRT for her sterling work. Jen Aldous and Charlotte Hall will be taking on aspects of this work in 2016.

- In the final months of 2015 the weather again provided us with a reminder of its power and Cumbria again (2005, 2009 and now 2015) received rainfall that Noah would have been proud of. The pattern was somewhat different from 2005 and 2009 in that more fell but over a much longer period (November and December rainfall recorded in Windermere totalled 7cm short of a metre with over 11cm falling on the wettest day). We are all familiar with the consequences and the Flood Recovery Committee that has been set up since. However major questions have been asked about our flood resilience and a number of initiatives have been suggested as being more urgent than formerly thought ("Slow the Flow"). SCRT has been asked to comment on several initiatives likely to be affected by such events and the proposed Lyth Valley Internal Drainage Board is one of these. Following earlier discussions SCRT is still assessing the information available and has asked for more detail. Much of this has been difficult to source to date and information supporting the recommendations that are being sought by the Environment Agency and the proposers of the IDB are yet to be clarified by SCRT. The Trustees will be kept up-to-date with developments in this area for both the Lyth and other SCRT catchments.
- Meredith Revill was appointed to a part-time administration and public relations post in late 2015 in order to ensure that the large increase in staff numbers (from 2 full-time and 2 part-time staff to 5 full-time and 3 part-time staff in just over a year) is balanced by an improvement in infrastructural working. This appointment reflects considerable dialogue at the Executive meetings in 2015 in order to create a well-run organisation with a much larger staff and income that is able to cope with much larger and much more complex projects.
- The year ended with a discussion on the need for more accommodation to house all the staff!



Roger Sweeting
April 2016

Finally I would like to thank my colleagues on the Executive Committee of SCRT: Dickon Knight, Ian McMurdo and (for the last 6 months) Diana Devenish who together with Pete Evoy, have enabled us to get this far. Thank you also to all the Trustees for their work on the board and in the catchments. The staff have also worked really well and achieved great progress in 2015 and I look forward to this being continued with this next year's challenges.

Treasurer's Report

Income	
Trading Income	£303,008
Project Funding	£351,980
Donations	£ 38,683
Grants	£ 52,089
Events & Other Income	£ 1,544
Total	£747,304
Expenditure	
Trading Projects	£271,480
Other Project Costs	£ 67,461
Wages	£135,615
Overhead Costs	£ 50,048
Total	£524,554
Surplus for Year	£222,750

This year saw the charity's busiest year to date and we carried out £524,554 of project work. Part of this was due to the grant work we carry out, but we also carried out a major contract project on Elterwater for United Utilities plc. This meant we have had to register for VAT, but has allowed us to broaden our work basis and project work. It also strengthens our financial position. Our income this year was also at a record level and we already have commitments to carry out an equal level of project work in the following year.

Our project work has stepped up a gear this year and this was due to a number of projects that we have been working to bring forward and have now come on stream. The first of these is the BIFFA Award, working with the Freshwater Biological Association (FBA) on the Freshwater Pearl Mussel project. This is a three year project and involves trying to re-establish some

suitable habitat for the re-introduction of Mussels being bred at the FBA in the Windermere and Kent catchments, as well as helping those existing stocks to survive and thrive.

The second project is the Catchment Based Approach (CaBA), which is a DEFRA funded national project to establish suitable catchment plans for all the catchments in our area. This is vital work for the Trust, as it will help us establish the priority areas of work in all areas, which will also help with future funding applications. It also strengthens our position as Catchment Hosts for our whole area.

The third major project to begin this year was the Conserving Coniston and Crake project. We were successful with our bid to the Heritage Lottery Fund. This is potentially a 4 year project, but this first year involves a preparation stage during which we build a plan for the 3 year delivery phase. We are required to re-submit for this final stage.

The fourth major project is the Elterwater Project which we are undertaking on behalf of United Utilities plc. This involves the monitoring of the phosphate levels of the inner basin of Elterwater Tarn, where the levels are excessive. The proposal is to install a pipe to divert more water through the basin and help flush out the excess phosphate on a managed basis. This has involved some major engineering operations under difficult conditions. Due to the nature of this work, it has been necessary for us to register for VAT purposes. This project has also enabled us to increase the core funds significantly.

In addition to all this work, we have continued with our more long established projects, such as the work with the Cumbria Invasive Non Native Species projects, River Restoration on the River Kent, Reedbed restoration work on Windermere, and many other projects.

Due to the increased workload, we have recruited three new staff, one each for the BIFFA project, CaBA project and also the HLF project. The Trust Manager is having to reduce some of his direct project work and undertake a more administrative position and we have boosted the help he requires. There may be other appointments during 2016 as we discuss additional projects in collaboration with some of our partners, particularly following the major flooding in early December 2015. This means we will need to expand the office space we occupy. Fortunately there are opportunities in this respect within the existing building occupied by the Trust.

The Experience the River project has been run as our headline educational project for a number of years and 2015 will see this as the final year for this, as we look for a fresh approach to the educational role for 2016 and beyond.

Trust Manager's Report

At the time of writing of this report in early 2016, Cumbria is still reeling from the shock of the devastating floods brought to many in December 2015 by storm Desmond. Although Desmond, compounded by subsequent storms, brought havoc on a wide scale, many of our own communities in South Cumbria were also very badly hit; Kendal, Burneside, Staveley, Ambleside, Beetham and Milnthorpe, Newby Bridge and Backbarrow, Ambleside, Cartmel, Coniston, Grasmere, Hawkshead and many other individual domestic and business properties have been affected. The scale and intensity of the rainfall was unprecedented and while the recovery process will continue for many months to come South Cumbria Rivers Trust is now working closely with flood management authorities and other partners to explore how our own work may assist improved flood resilience into the future. Much more to come I'm sure.

On a much brighter note 2015 was again a very successful year for SCRT. Project delivery continued at a high rate; you can see examples of some of these in the following pages. Notably, we increased our staff levels through the appointment of three new full time employees who we very much welcome to the SCRT fold. Dr Mike West, Jayne Wilkinson and Dr Charlotte Hall join the team at an exciting time to develop, manage and deliver new projects and expand SCRT's scientific and technical capabilities. We have included an introduction to Mike, Jayne and Charlotte later in the report which we hope you will find interesting.

One point of special note for me is that alongside our project work we successfully launched the new Kendal Catchment Partnership at a summer event held at Kendal town hall. One hundred and thirty five members of the public came to see, learn and talk to us about the work we do on the River Kent and its tributaries; thirty of these local people signed up to become volunteers. We have high hopes that we can develop this community interest to bring a local focus to this regionally and nationally important river system.

Finally, as a small charitable organisation we are always very much aware that we can go only so far as our funding will allow. As you will see, 2015 has yet again been another successful year at SCRT. We, of course, work hard towards building even greater success for the future. However, as we continue to work in uncertain and financially constrained times we need to be particularly vigilant of pitfalls. In the meantime, I would particularly like to thank all our trustees, patrons, supporters and partners for all their help, hard work and support during 2015.

Pete Evoy, Trust Manager.

Rusland Pool Tide Gate Reinstatement

We have been working in partnership with RSPB and their 'Source to Sea' project which aims to address Water Framework Directive failings (via the Catchment Restoration Fund- CRF) on many of the rivers and catchments that flow into Morecambe Bay. The aim of this project was to restore natural connections along the watercourse (removing barriers) by reinstating a dilapidated tide gate structure on Rusland Pool, north of Haverthwaite. This work will provide control of tidal flooding into Ireland Moss and will allow the passage of eel into the proposed rehabilitation of Ireland Moss raised bog.



Rusland Pool tide gate, March 2015.



Ireland Moss drain, March 2015.

Elterwater Restoration

Why work at Elterwater?

We are working in partnership with United Utilities to improve water quality in Elterwater. Elterwater SSSI has been in unfavourable condition for many years. The Inner Basin of Elterwater, and to a lesser extent the Middle Basin, have particular problems with algal blooms which can be harmful to stock and impact negatively on the plants, invertebrates and fish in the lake. The poor water quality can also affect the River Brathay and Windermere only a few short miles downstream.



Macrophytes on Elterwater

What is the problem?

Elterwater's Inner Basin received the discharge from Elterwater Sewerage works from 1974 until 1999 and even though effluent has been re-routed, phosphate trapped in the lake sediments still generates algal blooms.

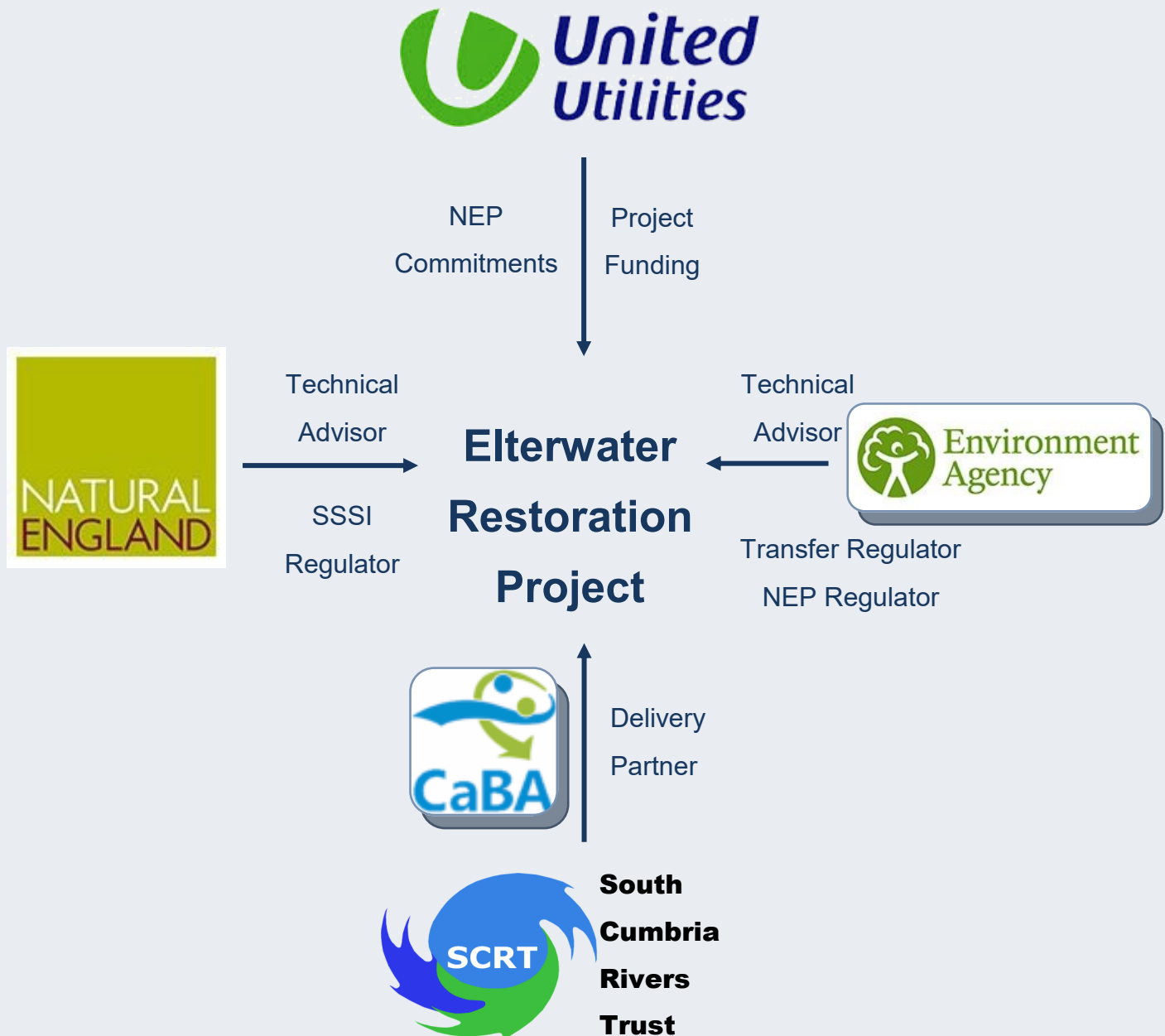


Work to be undertaken:

A 300m long pipeline is to be run from Great Langdale Beck to an existing ditch feeding into the lake, water from the beck will be used to increase the turn-over of water in the Inner Basin and prevent the conditions that allow the algae to bloom.

A YSI probe is being used to monitor dissolved oxygen, pH, temperature, conductivity, turbidity and depth to 10metres at fortnightly intervals.

Collaboration was at the heart of delivering the Elterwater Restoration Project



‘ SCRT are delighted to have been approached by United Utilities to help bring a solution to the remediation of Elterwater. Through our contacts with regulatory authorities, landowners, the farming and other local communities, plus the assistance of a variety of contractors, we have been able to scope, design and build this intervention. This collaborative approach has been vital to success.’ - Pete Evoy, Trust Manager.

Restoring Freshwater Mussels In England

-Biffa Award

We welcome Dr Mike West who started his first year of a new *Biffa Award* funded project in April. The project aims to safeguard the future of some of the most important critically endangered freshwater pearl mussel (FPM) populations (*Margaritifera margaritifera*) remaining in England.



'Practical solutions to improve river habitat and water quality will result in significant improvement to fisheries, invertebrate communities, farming practices and ultimately existing freshwater pearl mussel populations'.



In river habitat improvement works at Dubbs Beck was granted by Natural England. The work included macrophyte removal trial along 75m of the beck to expose salmonid spawning gravels. Water Milfoil root material was observed to be binding together salmonid spawning gravels making them unavailable for the laying of redds. More than 80% of the stretch where removal was undertaken exhibited excessive growth. Given the constrained nature of spawning sites along the beck a significantly increases spawning sites are now available.



Further river improvement works including boulder placement and large woody debris installation were identified as a possible methods for providing increased spawning habitat and salmonid refuge sites within Dubbs beck and Little Langdale beck. .



Ten large woody debris structures have been installed into Little Langdale Beck with a view to improving flow path heterogeneity, leading to gravel sorting across the flow path and significant salmonid refuge site creation. Confidence in the suitability and effectiveness of this method of providing fish cover was proven by the observation of fish gathering within the structures 15 minutes after completion.



Surveying the
river Brathay
near Skelwith
Bridge

FPM surveys have been undertaken on the River Brathay where a total of 9 mussels were found. Additionally, during the first day of surveys at Skelwith Bridge one of the mussels was observed to be releasing glochidial conglutinate.

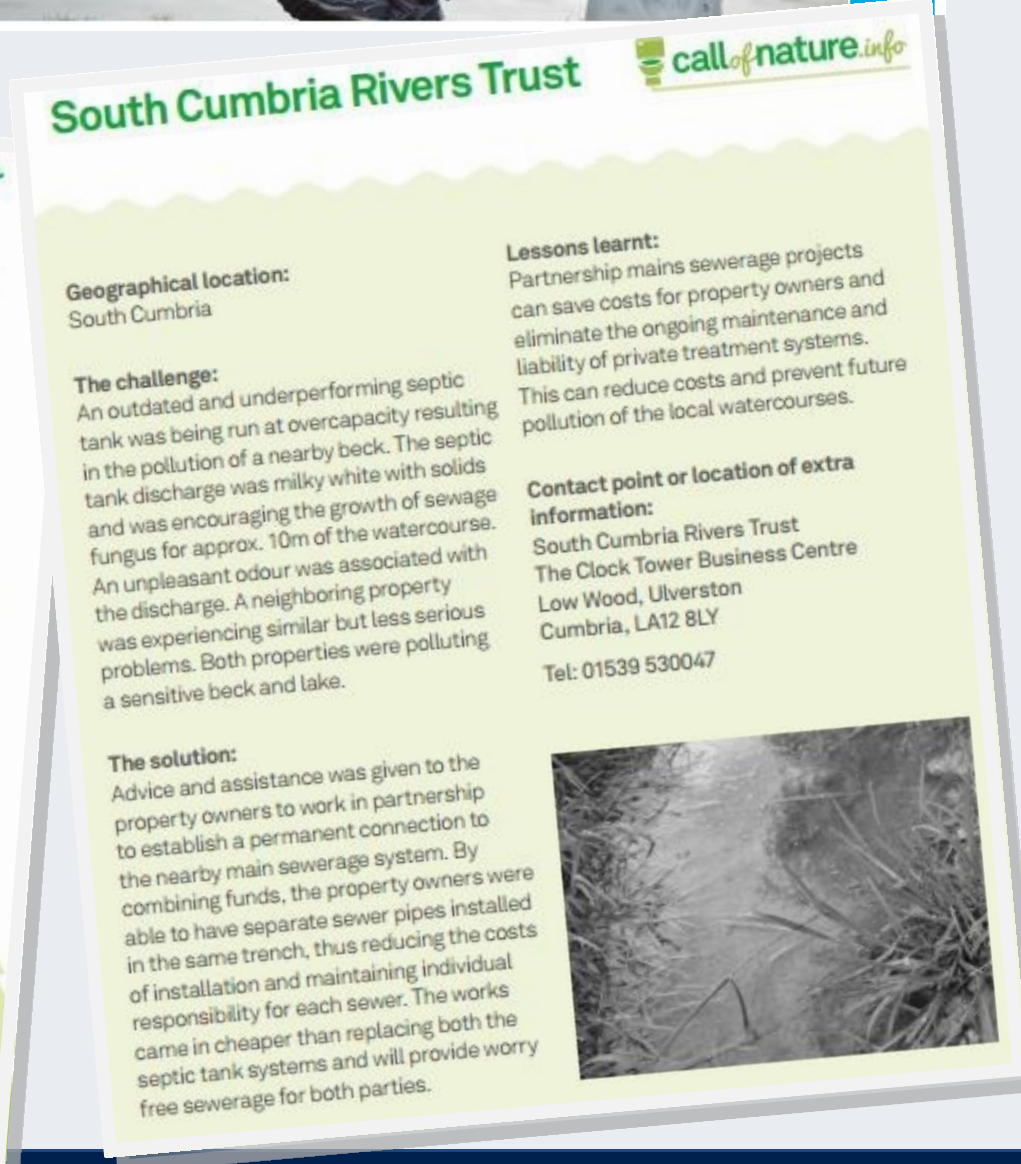
Following discussion with FBA staff the material was collected and returned to the Ark Facility at Ferry House. Here the conglutinate was introduced to a tank containing brown trout in order to attempt encystment. This technique of glochidial harvesting from wild mussels has not previously been trialled. Unfortunately no encystment has been detected at this stage.



Freshwater pearl mussel releasing glochidial
conglutinate

A New Guidance Toolkit For Septic Tanks

Working alongside Morecambe Bay Partnership, we delivered **4** workshops across South Cumbria for **60** people, to review existing literature, in order to aid the design and development of a new guidance toolkit aimed at septic tank owners.



CFINNS

The aim of this project is to achieve a sustainable county-wide management framework that will prevent the introduction of, or detect, control and/or eradicate specified INNS throughout Cumbria. The CFINNS Initiative is aiming to promote awareness and management of freshwater INNS issues from promoting biosecurity to training volunteers and coordinating removal of certain species.

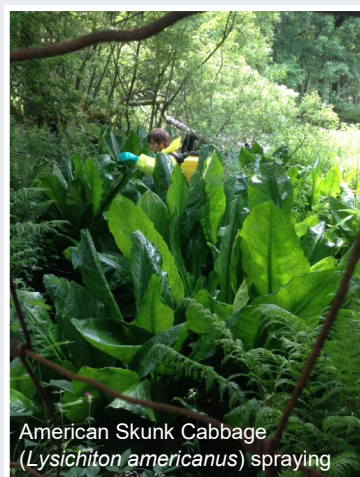
Project objectives:

1. Prevention
2. Early detection, surveillance, monitoring and rapid response
3. Mitigation, control and eradication



Bekka has been busy preparing the **2015-2020 Biosecurity Plan** and has delivered a series of identification and biosecurity workshops in the north of the county.

Jen Aldous, Invasive Species Officer has started her maternity leave and Meredith Revill joined us to help co-ordinate INNS control and volunteer work parties.



American Skunk Cabbage
(*Lysichiton americanus*) spraying

'I loved jumping on the huge pile of Balsam we picked!' - one of SCRT's youngest ever volunteer Himalayan Balsam Bashers.



Catchment Plans



We welcome Jayne Wilkinson who has joined SCRT as Catchment Planning and Delivery Officer. She was recently working for the Yorkshire Dales Rivers Trust on a project to co-ordinate and train volunteers to carry out walkover surveys. Prior to this she was at Natural England, working closely with partners across Cumbria to develop freshwater plans. She gained an educational background with a BSc in Environmental Biology from the University of Nottingham and an MSc in Ecology and Conservation from Lancaster University, during which she spent some time at the Freshwater Biological Association on Windermere.

The aim of Jayne's work is to develop catchment plans across the **5** catchments within the SCRT area, working closely with partner organisations and local communities via the local catchment partnerships.

- Develop strategic aims for the catchments
- Consult with relevant organisations
- Identify funding sources
- Support local catchment partnerships



Jayne will initially be focusing on the River Kent catchment, and the Kent Catchment Partnership (**KCP**) was launched at Kendal Town Hall with Kendal Town Mayor Cllr Chris Hogg on July 24th.



Conserving Coniston & Crake - Heritage Lottery Fund



In November we welcomed Dr Charlotte Hall who will prepare the delivery phase of this Heritage Lottery Funded project. This project aims to protect, monitor and restore the freshwater environment of Coniston Water, the River Crake and the wider catchment area, through a programme of conservation, community engagement and education.

The project will run between 2017 and 2020, with an ongoing legacy beyond this time period. It is a South Cumbria Rivers Trust project initiated and run by Coniston and Crake Catchment Partnership.

Prior to this, Charlotte was at the Earthwatch Institute, coordinating and delivering a citizen science project on freshwater quality. Charlotte has a research background in lake sediment chemistry, and consultancy experience in the chemistry and ecology of all freshwater environments. She is interested in how science is communicated and enjoys working with volunteers from all sorts of backgrounds. Charlotte is looking forward to working with the local community in the Coniston and Crake catchment area and to getting to know the Lake District a lot better!



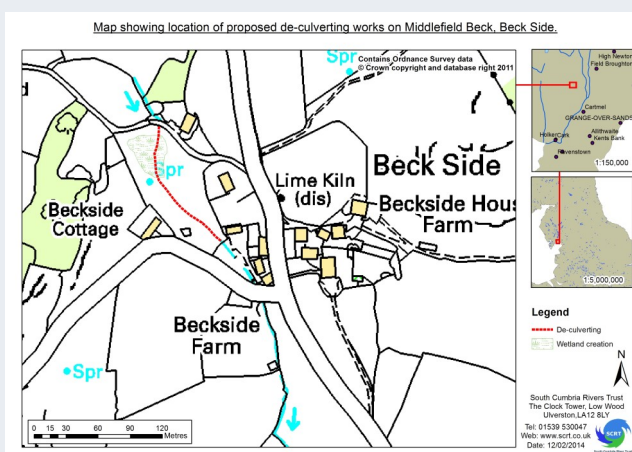
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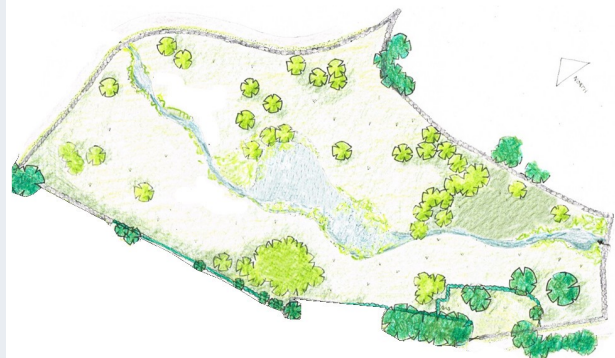


River Eea Beckside De-culvert

Our de-culverting project at Beckside, Cartmel, falls within a wider ongoing habitat improvement scheme across the River Eea catchment. This project was designed to re-naturalise Middlefield Beck, where it has historically been straightened and revetted. Removal of this culvert, together with the creation of approx. 150m of new river/beck and wetland habitat will provide additional spawning areas for trout and salmon populations and for the critically endangered European eel. SCRT worked in partnership with a number of local organisations and community groups, e.g. Holker Estates, Environment Agency, Cark and District Angling Association, Cartmel in Bloom, Cartmel Priory School, Electricity Northwest and Sarah Byrne Limited, to deliver this project.



Landscape Proposal design by Sarah Byrne



Windermere Reedbeds

- CPAF/WFD Partnership Fund

Continuing from the Restore the Shore project which began in 2012, our new project aims to protect and restore **4** reedbeds around the shores of Windermere. *Phragmites australis* rhizomes taken from Leighton Moss RSPB have been planted at High Wray Bay and Harrowslack this year. A short film of the project can be viewed here: <http://bit.ly/2ffTJ2V>



Preparations for reedbed planting at Mitchell Wyke and Ash Landing are also underway and we hope to complete the project by May 2016.

To Be Continued.....

The River Restoration Strategy: River Kent SSSI 6 year plan is now in full swing. Work in progress includes:

1. Continued investigations into Country Side Stewardship options for 'making space for water' and other options for compensating landowners for inundating their land.
2. Plans for the removal of embankment and revetment along the banks of the River Kent, Staveley.
3. Development of restoration plans for Dubbs Beck. This will include the removal of approx. 400m of revetment and bank protection from the beck, re-profiling of the banks and re-meandering where suitable.
4. Weir removal feasibility studies.

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