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Cumbria  
Rivers  
Trust

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ANNUAL  
REPORT 2016

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## Chairman's Report 2016

- This report concerns the year January to December 2016 although because of the severe flood in December 2015 it does include events and developments that owe their existence to Storm Desmond in early December 2015.
- There have also been many reports published in 2016 that owe their existence to Storm Desmond. Some major climatological reports and events coincided with these as a result of other climatological observations. (These are listed at the end of this report and can be sourced from the internet or FBA library). For example, 2016 was the first year in the last several thousand where levels of carbon dioxide, as major greenhouse gas, exceeded 400ppm every day of the year (cf 1800's average 280ppm). In the UK Climate Change Risk Assessment 2017 synthesis report mean global temperatures are predicted to be nearer 2.7°C higher than now compared with hoped-for increases of 1.5°C and may be closer to 4.0°C above current levels by 2100. The very nature of SCRTs work will be changed because of this.
- Major changes in infrastructure of government and apportionment of funding are already in train-downsizing of DEFRA and its component family organisations (EA, NE, Forestry Commission). Changes in the structure of the EA and NE, concomitant with financial downsizing, have further complicated communication lines.
- The exit of the UK from the European Union as a result of the June Brexit vote may remove or dilute important environmental directives and eliminate farm subsidies within two years. Of particular relevance to SCRT are the possible changes in emphasis to tourism as opposed to farming for landowner support and continued compliance as currently exists with the Water Framework Directive and the Habitats Directive.
- At present (2016) SCRT has 8 members of staff with one (Jen Aldous) currently on maternity leave). Because of the increase in staff levels over the last 2 years a decision was made to move our accommodation within the Clock Tower. This is now complete.
- Fortunately, river basin management remains at the core of the EA and the River Trust movement.
- In the Coniston and Crake catchment, Charlotte Hall is preparing a bid to the Heritage Lottery Fund which will be submitted by the end of the year. (This bid was successful and following some practical work with the rest of the staff, Charlotte will take this forward in 2017).
- The Lyth Valley proposal for a 21<sup>st</sup> century equivalent of an Internal River Drainage Board (Water Level Management Board) has met several obstacles during this year (de-maining, boundary amendments, modelling the Ulpha channel, perceived flooding risks) but for reasons associated with legislative process is unlikely to complete its development within the next 2 years. 2021 seems to be a likely completion year! Jayne Wilkinson is representing the interests of SCRT in this work.



## Chairman's Report 2016

- Publicity, web-site management and administrative support continue to be the focus of Meredith Revill's work.
- The Pearl mussel project continues for a further year and a half with Mike West providing advice to the riparian owners in the Brathay and Kent catchments. The project is due for completion in September 2018.
- Invasives-control continues with Bekka Corrie-Close keeping this at the top of the SCRT agenda.
- Mike Sturt continues to provide coordination and scientific support to all of the above projects.
- All the above, from the response to the floods and SCRTs management of the aftermath, has been coordinated by Pete Evoy who has driven the Trust forward throughout a most challenging year.

I would like to thank my colleagues on the Executive Committee of SCRT: Dickon Knight, Ian McMurdo and Diane 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 worked really well and achieved great progress in 2016 and I look forward to this being continued with this year's challenges.

**Roger Sweeting**      April 2017

**SCRT Chairman**



## **Treasurer's Report 2016**

The Trust achieved a surplus on unrestricted funds of £8788 for the year, which, though was less compared to the previous year (£28,834), was a good result in a 'normal' year. This is also despite having to use the unrestricted or core funds for investment in tie for the Flood Management proposals currently being discussed with the Environment Agency. The previous year had seen considerable funds received for the trading income from the Elterwater project, which was not available this year. Our total unrestricted funds have therefore increased yet again this year and so we are therefore safely within our targets under our Reserves Policy (see below).

It has again been a busy year and the number of projects has increased. This has had implications on the Trust and so the we have had to increase the number of employees to undertake the work involved. We now have six full time staff and two part time staff. With this increase, we have also had to reconsider the office accommodation and so latterly in the year we moved to the larger office within the Clock Tower Business Centre known as The Refinery. This has eased the pressure and made the work environment better. It will also allow for the expected further increases and has also facilitated the housing of an employee from the Rivers Trust working on the Life IP project, which covers the whole of the North West.

The move and increase in staff numbers has also allowed for the review of the roles. As a result, Pete Evoy, has moved to more of an executive role, more involved in running the Trust and also seeking additional projects and funding. Some of his role in managing the projects and other staff members has been delegated to both Mike Sturt and Rebecca Corrie-Close. Everyone has moved into their new roles with enthusiasm and seamlessly and so this bodes well for the future.

From the project work perspective, this has been a year of consolidating. There has been a huge amount of work carried out and as can be seen from the figures we have spent £484,216 on the unrestricted project work. The variety and extent of the work can be seen within note 11 on page 16. It has therefore been an excellent delivery year for the Trust.

It is worth pointing out the work on the River Kent Restoration project. This project has been going on for a few years and is a partnership project with the other two river trusts in Cumbria and Natural England and the Environment Agency. Last year this project won the coveted River Restoration Centre Nigel Holmes Trophy for the best overall project in the UK for river restoration work. During this year, we reprofiled the Jumb Quarry



## **Treasurer's Report 2016**

near Kentmere, which was being undermined by the river and threatening the total collapse of the quarry into the river. We also undertook a major river bank removal at Staveley, which then allows the easement of flood water and so will ease a bottleneck at this point. No additional funds were granted this year and so the completing of works saw a diminution of funds held for this project by £123,017.

Other major work also took place under the BIFFA Freshwater Pearl Mussel Project, mainly up in the Langdale area with much tree planting, fencing work and general habitat restoration. We also completed the initial preparation stage of the Heritage Lottery Grant for the Coniston and Crake Catchment. The submission for the three-year delivery phase was submitted during November and at the time of writing, we have heard that we have been successful in obtaining this next stage; a grant of £763,300 over the three years. This therefore bodes well for the future.

Our work in the eradicating of invasive species continues and is a pioneer project that is recognised throughout the UK. Funding for this is becoming more difficult, but we are looking at innovative ways to maintain the income stream required to continue.

Considerable work has also taken place this year with our website development and publicity. The most important part of this work has been the preparation of our catchment plans, showing the work that has been done and setting out the work that needs to take place over all our catchments. This is a vital tool and will be essential in the funding proposals for the future.

Storm Desmond in December 2015 highlighted the problems with the risk of flooding in our area. We have been in consistent discussions with the Government bodies and agencies involved and we are in a very good position to take a major lead in the work that will be required in the years to come. This has been a long and drawn out debate and we have had to invest considerable time into this, however we consider that much focus will be given to this for funding and so we hope our investment will bear fruit over the years to come.

**Dickon Knight**

**SCRT Treasurer**



## **Trust Manager's Report 2016**

With such a comprehensive report from SCRT's Treasurer on the previous pages and the detail of the breadth of work conducted by the SCRT team in the reports that follow there is little left for me to expand upon.

However, I would like to take a little time to focus on one new strand of work that has perhaps been a game-changer for SCRT in 2016 and which grew out of the devastating floods that hit Cumbria in December 2015. Firstly, with our place at the table of the new Cumbria Flood Partnership which formed in early 2016 we became increasingly involved in the flood related issues of South Cumbria. This culminated in being invited to chair and lead a new Catchment Management Group for South Cumbria. The aim of this new Group is to bring together the Flood Risk Authorities, environmental organisations, community representatives, landowners and business representatives among many others to work together to bring flood and other benefits to communities at risk of flooding through our combined work. Our first meeting was held in October. As you might imagine, this is no mean feat and it has been very hard work. However, the benefits of collaborating with a wide range of partners to understand where each is working in our catchments and having the opportunity to link with them to achieve better outcomes are very much worth the effort. At the time of writing we are continuing to help shape this Group to allow it to develop and evolve into a significant force. I will be very interested to see how my own thoughts and views develop in respect of this when I write my 2017 report.

In the meantime, and before I let the pages that follow speak for themselves I would like to pass on my sincere thanks to the talented, dedicated and energetic staff who make up the team at SCRT and make all we do possible. I would also like to thank all SCRT's Trustees, particularly the Executive Committee, for their hard work, sage advice and guidance.

**Pete Evoy**

**SCRT Trust Manager**



# 1<sup>st</sup>

**'River Prize'**  
River Restoration Centre



# 60

riverfly survey sites



# 85

metres

winning throw in  
Stone Skimming  
Championship

28km<sup>2</sup> of still waters in  
our catchment



# 1490

metres of freshwater  
mussel surveys

# 192

Salmon caught on  
camera at Backbarrow  
fish counter

# 9000

tonnes  
of old mine spoil moved out of  
reach from upper River Kent



# 2016 UK River Prize Winners Rivers Eden, Derwent and Kent

*Rivers Derwent, Eden and Kent Partnership and multiple benefit project*

The Cumbria River Restoration Strategy (CRRS) is a partnership project between Natural England, the Environment Agency and three Rivers Trusts (Eden, West Cumbria and South Cumbria). The partnership implements river restoration across three river catchments.

This project is an excellent example of what can be achieved through working in partnership. The Rivers Trusts (Eden, West Cumbria and South Cumbria) have led on the ground delivery of the work with strong guidance, technical expertise and support from experienced representatives from both the Environment Agency and Natural England.

Overall the work has restored 14 km of river across the three catchments to a more natural form, illustrating the large scale at which this project was undertaken. The overarching aim was to demonstrate to landowners, river managers and the wider community, the wide- ranging benefits associated with environmentally sustainable river management that works with natural processes.

The ambition moving forward is to continue to deliver the restoration measures required by the EU Habitats Directive and Water Framework Directive. The next phase of the CRRS will enable the partnership to deliver more significant pieces of work across all three Cumbrian catchments, using the lessons learnt from the last phase to help increase efficiency and effectiveness.



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# Reducing flood risk from source to sea

First steps toward an integrated catchment plan for Cumbria



**The Cumbria Flood Partnership** is a DEFRA initiative headed by the Floods Minister Rory Stewart OBE MP in the aftermath of storm Desmond which hit Cumbria in December 2015. The purpose of the CFP is to produce a flood action plan in collaboration with key partners and communities to mitigate against future flooding through agreed actions in respect of 1) Flood defences 2) Channel maintenance 3) IDB's 4) Property resilience and 5) Natural Flood Management.

Following completion of the [Cumbria Flood Action Plan](#), the EA and Cumbria County Council (as the Local Lead Flood Authority) have proposed significant changes to the way the Regional Flood & Coastal Committee works. At a meeting on 11<sup>th</sup> July called by the EA and CCC a proposal was put to the three Cumbrian rivers trusts (Eden, West Cumbria and South Cumbria) that they adopt responsibility for new, focussed "Catchment Management Groups" within the RFCC.

These CMG's will, as we currently understand it, be a clearing house for decisions made in respect of funding coming through the RFCC for work within the 5 work streams as described earlier.

In respect of Natural Flood Management and their respective techniques, we hope that this will allow rivers trusts in Cumbria to be at the centre of decision making to ensure funds are directed in the most appropriate and effective way to protect communities at risk.







With the effects and aftermath of Storm Desmond still very much in the minds of the people of Cumbria, South Cumbria Rivers Trust embarked upon a new 'River Restoration Strategy' scheme that will benefit wildlife and help to alleviate flood risk to the properties in the immediate vicinity and downstream. This project was funded through the Environment Agency, Natural England and Life IP Natural Course.

An historic embankment situated at the confluence of the Rivers Gowan and Kent was reduced by approximately





60cm thus reconnecting the river to its floodplain. Also, gravels displaced due to the floods were removed and the damaged field boundaries were repaired and made more resilient.

'Following the 2015 flooding, this project not only demonstrates the importance of working with, rather than against, nature but also how an enthusiastic and environmentally minded landowner working with the community can help safeguard that community and its natural heritage. This project forms part of the 'whole catchment' approach and is one that should be encouraged far more widely in flood prone valleys like the River Kent.'

Dr Mike Sturt, Technical Officer, SCRT.

This project also helped to recreate a wide range of habitats which are not found in modified or straightened rivers. For example, improved gravel beds where fish can lay their eggs, shallower margins where aquatic plants can grow and deeper pools where larger fish can find refuge.

Increases in the availability of these habitats will help to improve the populations of several threatened and endangered species such as the white clawed crayfish, freshwater pearl mussels, Atlantic salmon, brown and sea trout and otters, all of which are found in the River Kent.

Trees will be planted in a riparian buffer zone to help stabilise the bank, reduce sediment input and create shade, all of which will improve the habitat for fish and invertebrates.

Watch the video of the project here: <https://youtu.be/xGDxUSaX6Gs>





## Monitoring Water Quality

The Fish counter at Backbarrow has had a new gantry installed over the fish counter channel and 3 overhead cameras have been added. In addition, 2 infra-red cameras have been installed in the underwater chamber. Recordings taken will aid in our understanding of the local salmonid population dynamics.

Piezometers have been adapted to measure interstitial DO to determine site suitability for Freshwater Mussels. [Click here to find out more about this methodology: https://bit.ly/2JU2CeO](https://bit.ly/2JU2CeO)

22 new volunteers were trained at two training courses run by the FBA. In total, there are now 41 riverfly volunteers surveying 60 different sites across South Cumbria.

[Click here to view the 2016 Riverfly Report](#)

35 Electrofishing survey sites across South Cumbria

[Click here to view the 2016 Electrofishing Report](#)

Water quality monitoring within our catchments including temperature, conductivity, dissolved oxygen, turbidity, pH, sediment transfer data, phosphorus and heavy metals concentrations and assessing flow characteristics helps assess the environmental parameters that are affecting individual sites and thus direct further project work

Biffaward

Environment Agency

FBA  
Freshwater Biological Association

NATURAL  
OUR WATER, OUR FUTURE  
COURSE

Life

Catchment Based Approach  
Partnerships for Action

The Riverfly Partnership

SCRT

South Cumbria Rivers Trust



**SCRT, Environment Agency, Natural England and EU LIFE IP 'Natural Course' worked together on the Jumb Quarry project as part of the Cumbrian River Restoration Strategy.**

The project removed 9000 tonnes of mine spoil from the east Kentmere valley just south of the reservoir. The spoil heaps were the result of slate mining which ceased in the mid 1960's. They continued to be a problem providing high sediment loads resulting in a concentration of sediment deposition in the river channel where the height of the river bed has increased as a result of aggradation. Long term maintenance was necessary to reduce and prevent flooding downstream. Click here to watch the video: <https://youtu.be/w5k90wFFlxg>







## Restoring Windermere's Reedbeds

Since the 1870s, Windermere has lost 90% of its reedbed habitats. Reedbeds are an important part of the lake ecology, providing excellent habitats above and below the water and also protect the lake shore from erosion.

Our reedbed rehabilitation and planting at Ash Landing; Mitchell Wyke Bay; Harrowslack; Fell Foot and High Wray Bay; Windermere is now complete. Each of the sites used similar techniques to help the re-establishment of lost communities of *Phragmites australis* from bays around Lake Windermere. Reeds were cut from nearby Leighton Moss and bundled between fascines for stability and to aid rooting, encroaching vegetation was removed and trees that were shading these sensitive habitats were cut back. National Trust officers installed fencing around the newly planted sites in order to deter grazing by water fowl. Click here to watch the video: <https://youtu.be/D-9CDuXKsSU>

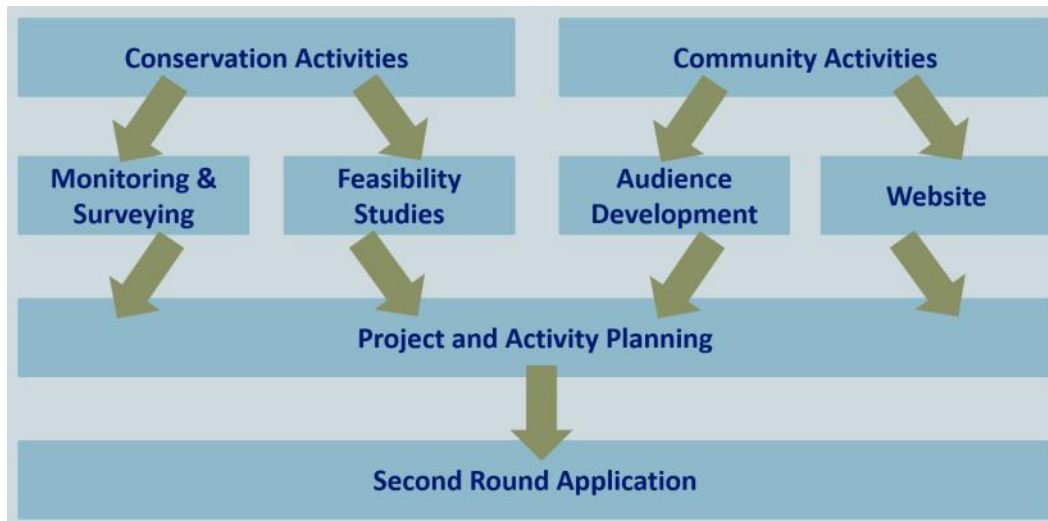
This project is part funded through the Environment Agency Catchment Partnership Action Fund and follows on from the Windermere Reflections programme, it is part funded by DEFRA's Catchment Based Approach. Thanks to all our volunteers and those from RSPB, The National Trust and Envirotech Ecological Consultants.





## 2016—The Development Year

To improve water quality, habitat and biodiversity in the Coniston and Crake catchment area, through conservation activities and community engagement



Project Officer, Dr Charlotte Hall, has made great progress with the 'Development Year' of the HLF-funded Conserving Coniston & Crake Project. Monitoring activities such as electrofishing, riverfly surveys, walk-overs, water quality surveys and reedbed mapping have enabled the identification of sites which may be suitable for further conservation activities. A comprehensive Audience Development Plan has been commissioned and will aid in further project and activity planning. The website is now online here:

<https://ccc.scrt.co.uk/>

Dr Hall has prepared and submitted the substantial 2nd Round Application to HLF and will hopefully receive confirmation of the continuance of the project very soon.





# ‘Walk & Talk’

Two successful volunteer engagement events were held with the Friends of the Lake District group and Arnside & Silverdale Natural History Society. Project Officers delivered informative ‘walk and talk’ sessions to inform interested parties, local out door group leaders and community officers about our work. This included a guided tour of the reedbeds at Fell Foot, the eel passes at Newby Bridge, the fish counter at Backbarrow, invasive species, tree planting, fencing, water quality issues and farm infrastructure improvements. 19 volunteers attended the events, all of whom will continue to spread the awareness of our projects to people they meet and take out in the countryside.

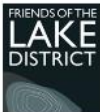


MAKING  
COMMUNITY  
CONNECTIONS



*"A very informative introduction to the work done by SCRT and their projects, and a lovely walk in a beautiful location too!"*

Biffa Award  
Building communities, transforming lives



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During works



Near completion

## Dubbs Beck: Part of the Cumbrian River Restoration Strategy

This project aimed to re-naturalise a section of Dubbs Beck, a tributary of the River Gowan. Dubbs Beck has been heavily modified (more than in the EU WFD technical sense) by both Victorian water resource managers and farmers who, understandably, responded to the land drainage benefits of a (former) water resource catchment, with issues of 'catchwaters' and culvert drainage widespread. A straightened section with embankment stretched for 375m along the mid-section of the beck. This 'motorway' section showed no evidence of former instability (as in palaeochannels on the floodplain) and current upland riparian wetland vegetation stabilises channel course (though not as a straight course as created by the revetment). The major gain from removing the revetment will be flow diversity which in turn will promote erosion and deposition of sediments and the regeneration of suitable habitats for fish and invertebrates such as the endangered Freshwater mussel.

The project is a partnership between South Cumbria Rivers Trust, the Environment Agency, Natural England, the Biffa Award as part of the Freshwater Mussel Project and the EU LIFE IP 'Natural Course' project. Click here to watch the video:

<https://youtu.be/Wb-HCMeHiD0>

Biffa Award  
Building communities. Transforming lives.

NATURAL  
ENGLAND

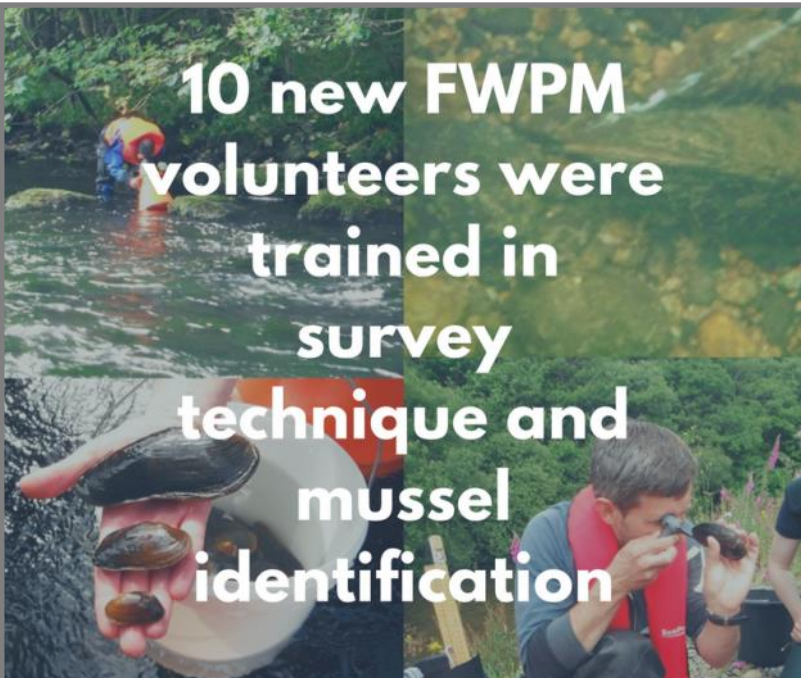
Environment  
Agency

NATURAL  
OUR WATER. OUR FUTURE  
COURSE



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3 individual mussels and a number of shells and fragments, including the one shown, have been found in surveys covering 1490 metres of rivers and becks in our catchments. This is great news and indicates that populations of freshwater mussels have shown successful recruitment within the last 7-10 years.



# Restoring Freshwater Mussel Rivers in England:

## Local Educational Workshops



4 local primary schools each received two days of workshops delivered with support from the Biffa Award and Nurture Lakeland. The days comprised of a science session focussing on revealing the facts, life-cycle, ecosystem, threats and current status of *M. margaritifera* followed by a fun artistic session. Each student created a freshwater mussel model which opened up to display a drawing of the mussel life-cycle. Then the students designed and delivered a fantastic mini-dramatization:

### ‘The life of a Cumbrian Freshwater Mussel’

(click on the picture below to watch the play)



Biffa Award

fba  
Freshwater Biological  
Association

Eden  
Rivers Trust

n  
nurture  
lakeland



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# ALL ENGLAND Stone Skimming Championships 2016

*"The weather was awful this time but lots of people still turned up and had a great day—thank you to all of the competitors, National Trust and Bowness Brewing Company for supporting us!"*

## Results:

### Women:

**1<sup>st</sup> Place - Becca Powis (34m)**

**2<sup>nd</sup> Place - Anna Adams (28m)**

**3<sup>rd</sup> Place - Frances Tomlinson (19m)**

### Men:

**1<sup>st</sup> Place - Ron Long (85m)**

**2<sup>nd</sup> Place - Michael Trout (79m)**

**3<sup>rd</sup> Place - Kevin Waltham (74m)**



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