The River South Esk
Catchment Partnership

River South Esk

Catchment Management Plan Review 2017

www.theriversouthesk.org

Contents

Foreword	3
The River South Esk Catchment	4
What have we delivered?	5
Action 1 Water quality	6
Action 2 Water resources	7
Case Study : Pearls in Peril LIFE+	7
Action 3 Flood management	8
Case Study : Rottal Burn Restoration	10
Action 4 River engineering	11
Action 5 Habitats and species	12
Case Study: Himalayan Balsam Control	13
Action 6 Socio - economic factors	16
Action 7 Delivering the plan	17
Conclusion	18
Members	19

River South Esk, Glen Doll

"As the Convener of the Scottish Parliament's Environment Climate Change and Land Reform Committee I understand entirely the importance of partnership working of this nature at a catchment level. And, as one of the MSPs through whose constituency the South Esk flows, let me warmly welcome the efforts of the Partnership and congratulate everyone concerned on the progress made thus far."

Graeme Dey
Angus South Constituency MSP

Front cover photographs: The Rottal Burn, Glen Clova | Volunteering at the Inch, Brechin | Montrose Basin Local Nature Reserve

Tony Andrews (Partnership Chair)
December 2017

Foreword

The River South Esk Catchment Partnership: a model of commitment

A decade ago a small group met in Forfar to discuss the idea of catchment management for the River South Esk. From the earliest days this group recognised that the catchment would benefit from a close-knit, integrated approach to management. As the partnership developed, we recognised that core objectives of the group should be to exchange information and explore ways of managing the whole catchment to the benefit of its communities, economy and environment, while taking account of practices and cultures of the area. The process evolved as the merits of informal collaboration became clear and the idea of the River South Esk Catchment Management Plan (RSECMP) was born.

This plan identified strategic aims for seven topics and 'action cards' were drawn up to focus on the main issues. In all 65 actions were identified and the plan was published in December 2009.

Local engagement and partnership working

Angus Council was involved from the beginning as the lynchpin of the partnership and it's RSECMP. The other founding partner was the Esk Rivers & Fisheries Trust (ERFT), whose interest in the river is primarily concerned with habitats supporting healthy populations of salmon and sea trout. The ERFT continue today to drive forward practical work on the ground. Scottish Environment Protection Agency, Scottish Natural Heritage and the Cairngorm National Park Authority soon joined, along with farming, forestry and wildlife groups such as the Forestry Commission Scotland, Scottish Wildlife Trust and Royal Society for the Protection of Birds. There is also industry engagement with Montrose Port Authority, National Farmers Union Scotland and the Scottish Government's Rural Payments and Inspections Directorate all represented on the group. Regular partnership meetings are well attended, and communications between stakeholders is assured by the programme manager.

Physical improvements to the river and its tributaries, and managing native biodiversity and non-native invasive species are at the heart of much of the partnership's work. Invasive species, such as American mink and Himalayan balsam have been discussed in steering group meetings, with resulting coordinated actions. Partners have restored damaged sections of river and conservation of iconic species, such as the wildcat, red squirrel and the barn owl, has been publicised within the group.

The 'catalyst' character of the River South Esk Catchment Partnership

With its voluntary attendance, informal networks and practical achievements, the partnership has attracted Scottish Government interest, with at least five ministerial visits over the last eight years. By raising awareness of diverse aspects of the River South Esk catchment among people with the ability to spread the word and take action, the partnership ensures that the momentum of the catchment plan is maintained. The River South Esk Catchment Partnership and its innovative plan to manage the catchment is a model of co-operation.

This report provides an update of progress with delivery of the River South Esk Catchment Management Plan. In the interests of conciseness, this is not a fully comprehensive review but provides an overview of key achievements for stakeholders and interested parties.

The River South Esk Catchment

The South Esk catchment is the area of land drained by the River South Esk and its tributaries. This includes its lochs, groundwaters, wetlands and the unique enclosed estuary of Montrose Basin.

The area is very important to Angus and beyond for a variety of reasons; these include as a source of livelihood (for example, farming, forestry, fisheries and tourism), for recreation and as a supply of private drinking water. It is also a habitat of great value for wildlife. The River South Esk is of such importance for nature conservation that it has, under the European Habitats Directive, been designated a Special Area of Conservation (SAC) for its populations of Atlantic salmon and freshwater pearl mussel.

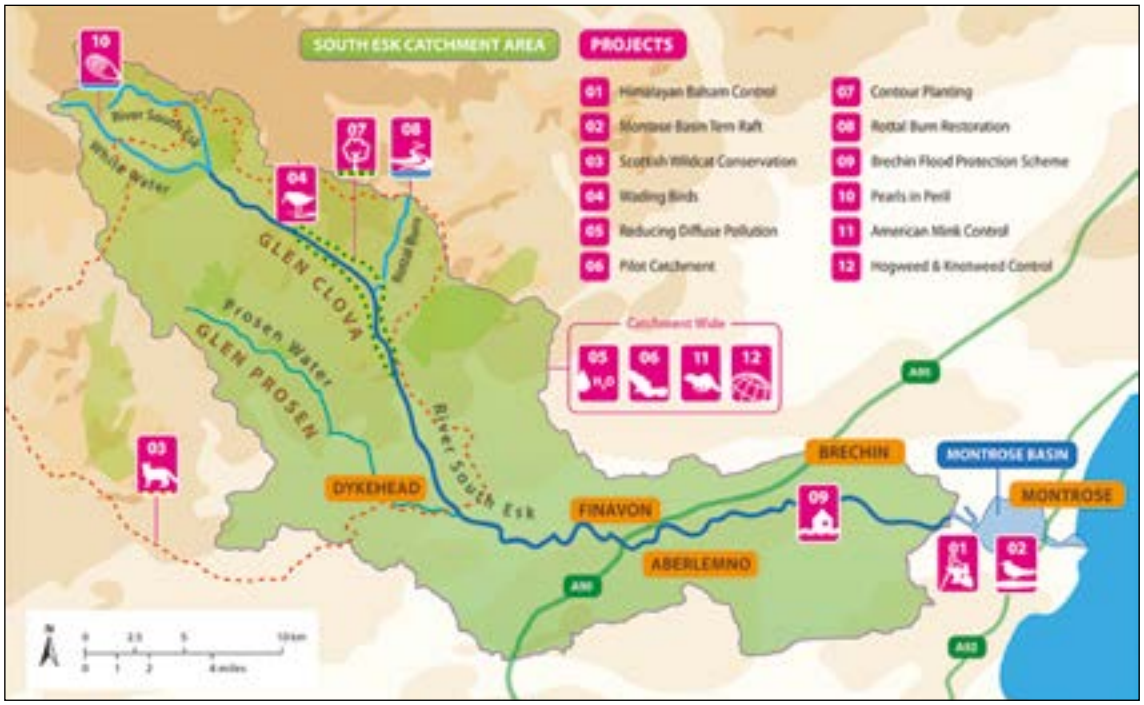


Figure 1. The partnership's dedicated project pages on www.theriversouthesk.org

What have we delivered?

The wide range of stakeholders that make up the partnership has undoubtedly been the key to delivering such a wide suite of projects. Each has their own stake in the catchment, and their own areas of expertise. For example, on the ground works have been delivered predominantly by the Esk Rivers and Fisheries Trust while water quality monitoring is carried out by Scottish Environment Protection Agency. Each partner organisation has its own strength and has contributed, where possible, to the projects that have contributed to delivery of the plan. Ideas and points for discussion brought to the table have always been eagerly welcomed and support has been forthcoming, be it financial or in-kind contributions of time, knowledge sharing, promotion, volunteer engagement etc.

By focussing on the Action Cards in the plan, we can measure our success in delivering projects that tackle the main issues in the catchment. The Action Cards change are to cover: quality of water; water resources; managing floods; river engineering; habitats and species; socio-economic factors and delivering the plan. The "in progress or complete" percentage has been calculated by collating information on projects and policy since 2010 and assessing which actions they contribute towards. 90% of the actions in the plan have been or are being delivered.

Many projects cut across multiple Action Cards and objectives. For the purpose of this report they are highlighted under one heading only. It was agreed by the steering group to produce a report giving a flavour of project work that has contributed to this success. More detailed information can be provided by the programme manager on request.

The full RSECMP can be found at **http://theriversouthesk.org/assets/Docs/river-south-esk-plan-dec09.pdf**

It is worth noting that since the plan's inception, the policy landscape in Scotland has changed greatly. Actions in the plan contribute towards many strategies, action plans and statutory obligations organisations in the partnership deliver. Themes include climate change, biodiversity, flood risk management, economic development and community planning.

65 ACTIONS

17 CATCHMENT OBJECTIVES
7 ACTION CARDS
90% in progress or complete

Approx.
£1 MILLION
funding spent on projects

66 SEPA man-days catchment walking in 2011/12 (400+ hours)

8,000m+ RIVER RESTORATION CREATION

5
COMPLETED
RIVER RESTORATION PROJECTS

7
HIGH QUALITY WATER BODIES
(Water Flow)

130km+
of riparian buffer strips planted

2,700
PARTICIPANTS
in educational outreach per annum

80,000 VISITORS
to NNR and LNR per annum

44
fishing beats in the catchment

Approx. **5,000** salmonids spawn in the catchment

180,000+ sq. m of Giant Hogweed sprayed
14, 500+ sq. m of Japanese Knotweed sprayed

400+
UNIQUE VISITS TO THE WEBSITE PER MONTH

3 international knowledge exchanges

5 MINISTERIAL VISITS

160+ hrs
Himalayan Balsam control volunteer effort

75k+ raised for INNS treatment

27,500+
NATIVE TREES PLANTED

4
INVASIVE SPECIES ON SITE ID POINTS

Action 1

Water quality; 88% in progress or complete

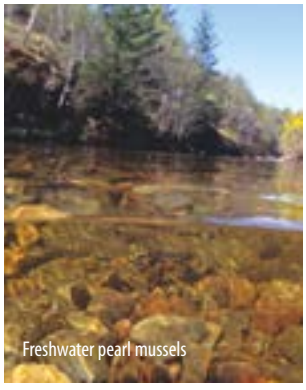
HIGHLIGHTS

- The River South Esk was a Scottish Environment Protection Agency (SEPA) "Priority Catchment" in 2011-12. SEPA spent more than 66 man-days catchment walking in the South Esk, a total of 460 hours and subsequently provided advice to individual land managers. This led to changes in land management which reduced pollution.
- Many farms in the catchment have carried out environmental improvements through agri-environment schemes.
- Water quality improvements have been recorded in the Lemno and Melgund Burns which were previously of poor quality.
- A varied programme of events, to raise awareness of the relevant legal requirements and best-practice methods for improving water quality among a variety of sectors, has taken place over the years in the catchment often run by SEPA, National Farmers Union Scotland and The James Hutton Institute.
- The Partnership steering group visited Southesk Farms for a "Sharing Good Practice" event and viewed examples of farming good practice.
- Pearls in Peril LIFE + carried out work to enhance water quality and riparian habitat on the banks of the Quharity Burn. This included:
  - 6km of banks protected by buffer strip fences to mitigate diffuse pollution from agricultural operations and livestock.
  - 3000 trees planted in protective shelters to enhance the riparian zone.
  - a pasture pump and 7 troughs installed to replace in-stream waterings for livestock and thus remove the risk of poaching from the riverbanks.

> Angus Council, as a member of the partnership, included Policy PV14 Water Quality in the Angus Local Development Plan. The purpose of this policy is to protect and enhance the quality of the water environment.


A riparian buffer strip


Contour planting, Glen Clova


Freshwater pearl mussels

Action 2

Water resources; 100% in progress or complete

HIGHLIGHTS

- The River South Esk comprises of 14 water bodies. Of these, 7 are considered to be at high status for hydrology (water flows), 3 are at good status and 4 are moderate. No water bodies are considered poor or bad. This represents an improvement since 2007/2008 when 3 waterbodies were considered to be either poor or bad.
- River South Esk Special Area of Conservation (SAC) Advice to planning applicants was published in 2011. This joint publication by Scottish Environment Protection Agency, Scottish Natural Heritage and Angus Council aims to assist developers when submitting a planning application for a proposal which may affect the SAC. See **www.angus.gov.uk/media/river-south-esk-code-practice-developers**

Riverbank restoration, White Water

CASE STUDY

Pearls in Peril LIFE +

Scottish Natural Heritage | South Esk & White Water

Pearls in Peril (PiP) was a UK-wide project running from 2013-17, bringing together 22 partner organisations to restore habitats benefiting freshwater pearl mussels and salmonids. Almost 50 actions were delivered across 21 rivers (incl. the River South Esk) designated as Special Areas of Conservation (SACs) for freshwater pearl mussel in order to secure the long term survival of mussel populations.

Protecting and promoting this critically endangered native species aids in restoring the river to a more natural state, improving the ecological resilience and strengthening biological diversity. The planting of trees along the river banks can reduce erosion making for healthier, cleaner watercourses. In the South Esk catchment around 5.5km of riverbank has been enhanced by riparian woodland planting, utilising SRDP Rural Priorities funding.

In June 2015, the Quharity Burn Riparian Enhancement project, a partnership between PiP and Angus Environmental Trust, was completed. 6km of banks were protected by buffer strip fences to mitigate diffuse pollution from agriculture; 3000 trees planted in protective shelters to enhance the riparian zone; and a pasture pump and 7 troughs installed to replace instream waterings for livestock, to remove the risk of poaching from the riverbanks.

Engagement with landowners, tenants and fisheries managers in the catchment helped gain support and approval to invest in river habitat creation. Awareness-raising workshops on diffuse pollution were held and farmers and land-owners were contacted to gauge interest in participation in projects and SRDP applications.

The project had strong community engagement elements. Combatting illegal activities and raising awareness of freshwater pearl mussel conservation has been integral to the project's success. A number of Riverwatch schemes were launched, raising awareness of wildlife crime affecting freshwater pearl mussel and how to report it and the 'Pearls in the Classroom' programme, implemented in primary schools in Angus, proved to be very popular.

Action 3

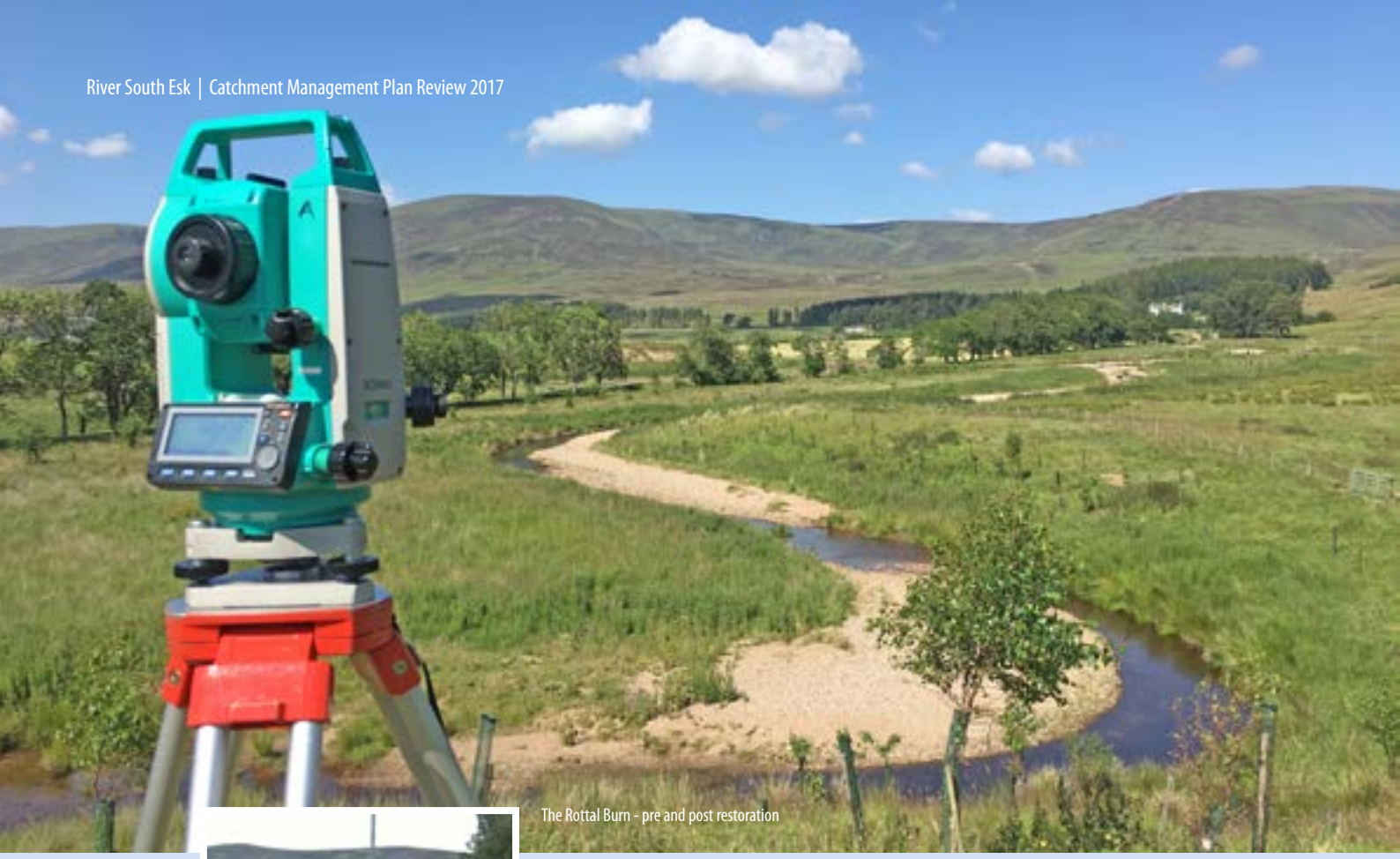
Flood management; 100% in progress or complete

HIGHLIGHTS

- The Brechin Flood Prevention Scheme was officially opened in October 2016. The scheme protects both residential and commercial properties in Brechin. The integrated flood and drainage scheme consists of:
  - direct defences
  - flood embankments
  - flood walls
  - upgrades to the existing surface water drainage system
  - work on the Denburn Culvert
  - installation of three submerged pump stations.
- The Glen Clova Contour Planting Project, a large scale forestry project aimed at reducing peak flows in the upper South Esk catchment saw two areas of contour tree planting take place in Glen Clova and Glen Doll in 2014. At present funds for the further development of the project are being investigated and extending the project to Glen Prosen is being considered. This project has multiple benefits not only for the river; it supports Scottish Government policies on woodland expansion and carbon sequestration) provides benefits to agriculture, increases low ground sporting shooting potential and enhances biodiversity.
- Angus Council has prepared maps of water bodies and Sustainable Urban Drainage Systems (SuDS). Surface water culverts mapping is on-going. The mapping of water resources is useful for understanding areas at threat from flooding and potential sites for Natural Flood Management and where hard engineering may be required. Roads engineers provide advice to ensure that surface water treatment is provided in the form of SuDS for all new development and aids in reducing water run-off.
- Angus Council published the Tay Estuary and Montrose Basin Flood Risk Management Plan in July 2016. Angus Council will now work with the local district partnerships to develop and publish Local Flood Risk Management Plans.
- Land surrounding the estuary of the River South Esk is vulnerable to fluvial and coastal flooding. The area's most vulnerable to rising sea level and/or storm surge and wave overtopping are identified in Angus Shoreline Management Plan 2. This is used to improve understanding, flood management and inform policy development.
- The Angus Local Development Plan contains policies which seek to minimise flood risk and to increase resilience to the effects of climate change. Policy (PV16) Coastal planning also contributes to flood management.

The Glen Clova Contour Planting Project, a large scale forestry project aimed at reducing peak flows in the upper South Esk catchment saw two areas of contour tree planting take place in Glen Clova and Glen Doll in 2014.

The Brechin Flood Prevention Scheme



The Rottal Burn - pre and post restoration

CASE STUDY

Rottal Burn Restoration

Esk Rivers & Fisheries Trust | Rottal Burn

This project aimed to restore the Rottal Burn to a more naturalised state, to enable it to support functional populations of salmon and trout, and to increase its general biodiversity potential. Physical works were carried out in 2012. The restoration will, overtime, enhance the neighbouring natural wetlands, providing an opportunity to view a variety of bird species typically found in natural upland wetlands.

Straightened sections of the watercourse have had meanders restored to more closely match the historic course of the burn. The flood plain has been reconnected to the watercourse and extensive native tree planting has taken place. The channel has been very active over the last five years and dynamic changes to developing gravel bars, pools and local bank erosion has occurred. On a regular basis students from many Scottish Universities, Abertay University in particular, have monitored changes in the burn and a valuable body of evidence on river naturalisation processes has been created.

The project, although driven by a desire to improve habitat for fish, has raised the morphological classification status of the burn under the Water Framework Directive (2003) and has been used as an example for Scottish Local Authorities, Elected Members and other stakeholders in promoting, understanding and adopting an ecosystems approach. The Rottal Burn project has provided "multiple benefits" and has been included in Local Climate Change Adaptation Strategies, The Single Outcome Agreement, Community Planning Locality Plans and Biodiversity Duty reporting.

Action 4

River engineering; 88% in progress or complete

HIGHLIGHTS

- A 650 m section of straightened channel in Rottal Burn, Glen Clova was restored. The works included:
  - Restoration of 650 m straightened channel
  - New 1,200 m meandering channel created
  - Floodplain reconnection
  - Connection to wetland areas
  - Formation of backwater
  - 20 Large rootballs placed in banks
  - 2,000 native trees planted
  - Monitoring network installed

  Key aims of the project were to increase the ability of the burn to support viable populations of salmon and trout, to increase its general biodiversity value, and to slow the flow from the Rottal Burn into the South Esk main stem, thus acting as a climate change adaptation measure.

> The channel is now expected to remain active and change naturally over time, developing gravel bars, pools and local bank erosion.

- Two phases of restoration work have been carried out on the Pow Burn, in the lower catchment. Phase three will begin in 2018. The restoration of the burn will provide a range of benefits including improvements to the management of local flood risk and enhancing local biodiversity. These improvements will be achieved through:
  - the creation of 915 m of second-stage channels
  - the removal of 350 m of embankments in places
  - and the setting back of 350 m of existing river bank
  - reconnection of relict meander features
  - creation of wet woodland areas
  - the placement of 41 in-channel deflectors

  These actions will encourage small scale variations in water flow, will enhance natural variations in the bed of the burn improving the local habitat for a range of species.

- The Pearls in Peril LIFE + re-profiled sections of river bank in the upper catchment. In total 900 m of boulder bank protection was removed from sections of the River South Esk and its White Water tributary within the Cairngorms National Park. The aim of the work was to improve habitat for freshwater pearl mussel, Atlantic salmon and trout. Removing the bank protection has allowed the river to naturally re-meander and in Glen Doll a stretch of the White Water has already changed route. The process was aided by three infilled connections to old channels being re-opened as part of further slowing water flow. The work has proved very successful and was shortlisted for a prestigious Saltire Award in 2016. An added bonus was the discovery of water vole colony during the works.

Action 5

Habitats and species; 95% in progress or complete

HIGHLIGHTS

Invasive Non-Native Species Control

- The threat of Invasive Non-Native Species (INNS) within the South Esk catchment has been highlighted by a range of leaflets, the partnership's new website and a suite of onsite interpretation, A2 size interpretation boards are located in Glen Doll, Cortachy, Brechin and at Montrose Basin.
- A "River Watch" scheme allows the public to share information with the partnership, report unauthorised activity, such as freshwater pearl mussel disturbance etc. on the river, and report the presence of INNS etc. Partnership staff then forwards this information, as appropriate, for action.
- INNS plant species have been controlled, and continue to be controlled in large swathes of the catchment. This includes:
  - 180,000 sq. m of Giant hogweed was sprayed beginning in the middle of the catchment and;
  - 14,500 sq. m of Japanese knotweed were sprayed in the three main areas of infestation.
  - Himalayan balsam has been controlled within Montrose Basin Local Nature Reserve by volunteers led by the Scottish Wildlife Trust's ranger. The site has been used as a good practice/demonstration site and has hosted a Chartered Institute of Ecology and Environmental Management Member Network Event entitled "Successful Manual Himalayan Balsam Control and Native Species Recolonisation in Practice". Himalayan balsam control has also been carried elsewhere in the catchment including at River Street in Brechin, Finavon and on South Esk Estates.
- American mink are monitored and controlled in the catchment. This began as part of the Scottish Mink Initiative. The Initiative aimed to protect native wildlife, such as water voles, ground nesting birds and economically important populations of salmon and game birds by removing breeding American mink.

Fisheries Management

- The Esk District Salmon Fisheries Board monitors the health of the fish populations in the South Esk. In common with the rest of Scotland, the population has been declining. This is thought to be as a result of increased mortality at sea. This is probably due to a combination of factors including natural climate fluctuations, man-made climate change, and salmon as a by-catch in marine fisheries.
- The South Esk Fisheries Management Demonstration Project carried out by Marine Scotland investigated the 'spring' component of the River South Esk salmon population took place over 3 years in 2012-14. Findings of the study included:
  - Only 16.7 % of sampled fish spawned in the middle reaches of the river and the remainder (83.3 %), spawned in the upper catchment in either Glen Clova or Glen Prosen.
  - The upper catchment was found to be in general more productive for salmon. Many sites were found to have production above the national average.
  - The lower catchment, sites in the Pow Burn and the Lemno Burn were notably poor with low numbers of salmon fry.

This study provided valuable insights that have been use to deliver a suite of environmental improvements.

Species Surveys

- In 1996, 2012 and 2014 Royal Society for the Protection of Birds carried out breeding wader surveys across Tayside, including in Glen Clova. The results of these surveys highlighted the importance of the floodplain of the River South Esk between Braedownie and Gella Bridge for breeding waders. This area is considered to be one of the most important areas for breeding waders (lapwing, oystercatcher, redshank, snipe and curlew) in Tayside with 230 pairs in the area surveyed in 2014. The surveys suggest that only oystercatcher numbers have increased between 1996 and 2014 and curlew, lapwing, redshank and snipe all appear to have declined. The protection of the remaining high quality breeding habitat found in Glen Clova is therefore a conservation priority.

  The information collected during these surveys can be used to inform conservation work on the ground, including providing advice to land managers on habitat management and the targeting of agri-environment schemes.


Himalayan balsam

CASE STUDY

Himalayan Balsam Control

Scottish Wildlife Trust | Montrose Basin Local Nature Reserve

Himalayan Balsam is a non-native species that is wide spread throughout the River South Esk catchment, particularly in the mid to lower sections. It grows in dense stands along river banks, where it can impede water flow and increase erosion. Reducing Himalayan Balsam promotes the return of native species to ecologically sensitive areas, improving water flow in times of heavy rain, reducing seasonal river bank erosion and improving amenity access to riverbanks.

This ongoing project aims to control the presence of Himalayan balsam in and around the Montrose Basin Local Nature Reserve and act as an example of good practice for other parts of the South Esk Catchment and beyond. Montrose Basin sits at the bottom of the catchment and faces constant infestation from the upper reaches of the catchment.

A dedicated team of local volunteers have spent over 150 hours helping manage the plant. The local community is engaged through public events that raise awareness of the importance of controlling invasive non-native species (INNS) and encourage new volunteers to join the work involved in the project. Scottish Wildlife Trust volunteers are also involved in a weekly effort through the Scottish Wildlife Trust Volunteer invasive non-native species Programme.

The Himalayan balsam project ties into ongoing INNS work on Giant hogweed and Japanese knotweed taking place in many areas of the catchment. This dedicated approach has been heralded as an example of how Himalayan balsam can be controlled in areas using manual removal alone and has been replicated in other areas of the catchment.


Scottish Wildlife Trust volunteers tackling Himalayan balsam, Montrose Basin

> The Angus Glens is one of the best areas in Scotland for wildcat and maintaining a strong population is crucial to halting and then reversing the decline of this unique mammal. Scottish Wildcat Action is a five year collaborative project involving monitoring of the wildcat population, promoting land management actions beneficial to Scottish wildcats and responsible cat ownership within the local community.

- The Tayside Local Biodiversity Action Plan 2016-26 will help shape the delivery of biodiversity projects and community engagement in the catchment area. The River South Esk Catchment Partnership is named as a partner in delivering 25% of the actions identified in the plan.
- While the South Esk catchment has no established populations of beavers yet, family groups are established on close by tributaries of the Rivers Isla and Tay. The partnership is planning sessions for practitioners on legal status, management and mitigation techniques.

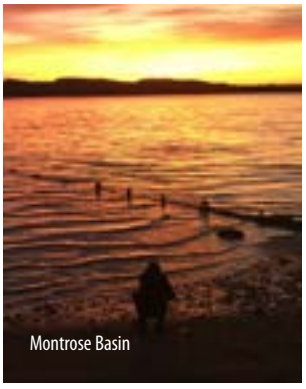
Habitat Enhancement

- A project to enhance the salt marsh and transitional swamp habitat in the Salt Pans area of Montrose Basin Local Nature Reserve, has trialled grazing with sheep, a bull and bullock and ponies at various points. The site has improved for waders and waterfowl and has seen some unusual visitors; a bittern was recorded in the area for the first time in 2015.
- Freshwater pearl mussels are one of the features of the River South Esk Special Area of Conservation (SAC). Site Condition Monitoring in 2016 found encouraging signs of recruitment of juvenile pearl mussels in the middle of the catchment, but some evidence that the population the upper catchment appears to be aging.
- Forest Enterprise Scotland has begun extensive broadleaf planting in the upper catchment. In Glen Prosen Forest, broadleaf buffer strips providing a barrier to commercial forestry practices have been planted. Measuring a minimum of 30m, and stocked with native species including alder, willow, aspen, birch and rowan, the buffers will create dappled shade and increase leaf litter. Planting began recently and the area will see significant woodland expansion over the next 3-5 years.

  On the banks of the White Water approximately 35 enclosures varying from 4x4 m to 10x5 m have been planted with mixed broadleaves alongside watercourses. Additionally, aspen, alder, rowan and birch have been planted in tubes in areas, to a depth of up to 100 m from river banks. This project may also see further expansion in the coming years.


Glen Doll


Scottish Wildcat


Montrose Basin

Typical upper catchment habitat

Action 6

Socio-economic factors; 89% in progress or complete

HIGHLIGHTS

- In 2011 the partnership produced an "economic scoping report" of the catchment, developing an overview of specific sectors contribution to the catchments economy. Forestry, farming, angling, field sports, accommodation providers, tourism, visitor attractions, and Montrose Port were all included. The report paints a picture of how critical some sectors are to the economy of the catchment, how successfully managed some sectors are and where other sectors could be developed further. The report is useful background paper and will be updated in the near future.
- Over the last 6 years Montrose Port Authority has spent in excess of £15m on quayside development. Commencing in January 2018 the Port will embark on the next phase of its development with two further berths on the north side being reconstructed.
- Renewables and innovative sustainable energy sources have been embraced in the catchment. There are Hydro schemes at the upper and lower catchment.
- There are 44 fishing beats in the catchment, with a variety of owners. Angling clubs, large estates, individuals, companies, syndicates, and even the Queen have a stake in the river.
- Angling tourism generates significant income for the area. Work is under way to participate in an EU LEADER funded project with a partner in Merikarvia, Finland - home to the second most popular angling river in the country. As well as focussing on INNS control, beaver management, forestry and water quality, it is hoped that the exchange project can aid in diversifying wildlife tourism in Angus, benefiting angling tourism in the catchment.
- The significant environmental improvements to the River Street area in Brechin, part of the BFPS, were delivered with high levels of community engagement. Improvements included the provision of a new play park, improvements to the paddling pool, street lighting improvements, extensive landscaping, environmental and social interpretation, improved access and even community developed mosaics that adorn the River Street. Angus Council and construction staff worked with primary and secondary schools in Brechin providing them with the opportunity to learn about the flood prevention scheme
- The upper and lower catchment has a National and Local Nature Reserve and in total is visited, on average, by more than 80,000 visitors per year. Formal and informal educational services are provided at both locations.
    - Glen Doll Rangers Service engage with approximately 150 children per year through school sessions and 45 adults and 160 children in formal education activities. Wildlife and Geology are the core study areas.
    - Montrose Basin Wildlife Centre provides activities which focus on the estuarine environment of Montrose Basin, pond dipping and bird identification skills. In 2016/17 1000 people participated in informal outreach and 1467 in informal programmes.

    At both locations visitors leave with a real sense of how special Angus's native wildlife is and how important it is to act responsibly in a wild environment.


Partnership visit to Kinnaird Hydro Scheme


Montrose Port


Habitat enhancement at River Street, Brechin

Action 7

Delivering the plan; 86% in progress or complete

HIGHLIGHTS

- In 2010 an Education & Awareness Strategy and Action Plan was developed by the partnership. The following materials and promotions were delivered through the strategy:
  - In 2011 the partnership established a dedicated website www.riversouthesk.org The website is the most important media for the partnership to reach a wide diverse audience and also highlight a wide range of issues. Recent figures show that from January to November 2017, on average, between 400-600 unique visitors visited the website each month.
  - Two information leaflets on biodiversity and INNS in the catchment were produced for general distribution and for use at exhibitions. Four INNS interpretation panels highlighting invasive species within the catchment were produced and situated strategically at the top and bottom of the catchment in areas with high foot fall.
  - The partnership produces a newsletter twice a year that is emailed out to a contact database of more than 130 contacts. This is available on the website and is shared on other organisation's websites
  - Partnership projects have been picked up by local and regional newspapers and TV and a host of environmental and industry bodies.
  - We use Twitter to share information quickly with a wide ranging audience and our followers have grown steadily
  - A range of presentations have been given over the years to stakeholder groups or the general public when requested or when opportunities arise. These have ranged from Village Hall Federation talks, Tayside Biodiversity Partnership seminars, The Institute of Fisheries Management Annual Conference in 2016 and in Iceland and Norway through the Archnetwork ERASMUS+ exchange programme.
- The culmination of five years monitoring work by Abertay University and catchment wide projects was presented at the Rottal Burn Restoration Student Seminar in 2017. A full list of student projects and abstracts is available.
- The partnership engage with the Cairngorms National Park Authority (CNPA) and neighbouring catchment management partnerships in a Cairngorms National Park Authority - Joint Catchments Knowledge Share. The River South Esk, Dee and Spey Partnerships share many common goals and encounter very similar issues. All have head waters in the CNPA area and all three have been invited by the CNPA to consider joint catchment approaches to issues such as diffuse pollution, woodland planting, river restoration, peatland restoration, Invasive Non Native Species (INNS) management, biodiversity enhancement and awareness raising and PR. All three partnerships aim to share good practice, and in the past the group has visited the Acharn Pearls in Peril site in Glen Clova, the Eddleston Water (a Scottish Land Use Strategy Pilot), in the Tweed catchment the Allt Lorgy restoration site and the Tarland demonstration site.
- The partnership has also created a portable educational resource box that is available on request and we seek to encourage schools to engage with relevant projects being run by partnership members, and others. The resource box includes: fact sheets and investigative games, books and CD Roms etc., river dipping equipment and river artefacts.
- In October 2016 our Chair and Programme Manager were invited to present at the 47th Annual Institute of Fisheries Management Conference held in Norwich. A presentation entitled 'Source to Sea, the River South Esk, and a Catchment Management Approach' allowed the work of the partnership's members from our headwaters to the estuary to be showcased.
- In 2015 the partnership Programme Manager took part in a structured training programme in Norway, A great deal was learned that can be to applied to the management of our own natural resources. Actions in the new Tayside Biodiversity Action plan 2016-26 were inspired by the visit.
- The catchment has hosted many Scottish Government ministerial visits that have focused on INNS, river restoration and planning.

Conclusion

The catchment management approach has been extremely successful in the River South Esk catchment. This has been possible in the first instance, due to the support received in creating the River South Esk Catchment Management Plan. Experienced participants from neighbouring catchment partnerships, the James Hutton Institute and a range of government agencies shared experiences and expertise resulting in a comprehensive plan for sustainable catchment management.

Throughout the life of the plan, partners, the community and a range of stakeholders have shared good practice, aspirations and when requested - valuable funding. This has resulted in the 90% delivery rate the partnership is very proud of.

The current plan has left Angus with a legacy. An area of the county has been managed using a sustainable, landscape scale approach for almost a decade. A wide range of environmental improvements and their impacts can be measured, lessons learned, and hopefully applied to the wider Angus area.

Future Plans

In 2018 the partnership aims to prepare and publish a new catchment management plan. Public and stakeholder consultation will inform the content of the plan and traditional and new consultation methods will be embraced. The new plan will aim to align with a range of National, Regional and Local strategies and will aim to expand on the range of multiple benefits delivered by the initial plan.

Priority themes may include:

- Climate change adaptation
- Flood mitigation
- Community resilience
- Biodiversity
- Invasive non-native species control
- Ecological coherence
- Woodland creation
- Volunteering & citizen science
- Economic development: farm diversification and angling & wildlife tourism

Thanks

The River South Catchment Partnership would like to thank everyone who made the progress of the plan possible. This includes everyone who promoted the partnership's work, provided valuable funding and perhaps more importantly - their time.

Members

Angus Council
Cairngorms National Park Authority
Esk District Salmon Fisheries Board
Esk Rivers and Fisheries Trust
Forestry Commission Scotland
James Hutton Institute
Littlewood Land Care
Montrose Port Authority
National Farmers' Union Scotland
Royal Society for the Protection of Birds
Scottish Agricultural College
Scottish Environment Protection Agency
Scottish Government Rural Payments and Inspections Directorate
Scottish Natural Heritage
Scottish Water
Scottish Wildlife Trust

Photographs: River South Esk Catchment Partnership, Kelly Ann Dempsey, Anna Cheshier, Scottish Natural Heritage and Angus Council

The River South Esk
Catchment Partnership

River South Esk Catchment Partnership
c/o Angus Council
Angus House
Orchardbank Business Park
FORFAR
DD8 1AN

T: 01307 473355
E: info@theriversouthesk.org
www.theriversouthesk.org
@southesknews

This publication is available in electronic format at:
http://theriversouthesk.org/
www.angus.gov.uk/the_environment/sustainable_angus/river_south_esk_catchment_partnership