the River Restoration Centre

Working to restore and enhance our rivers

Delivering River Restoration: Recipes for Success

13TH ANNUAL NETWORK CONFERENCE

Restoring Europe's Rivers

ACE · AlaskA · ARUP · Cain · Halcrow A CH2M HILL COMPANY · LAND & WATER Services · Penny Anderson Associates Ltd Consultant Ecologists · ROYAL HASKONING Enhancing Society · rshydro · Salix · WILLOWBANK Erosion & Conservation Services · WLW

SEPA
Scottish Environment Protection Agency

The Scottish Restoration Fund

The Scottish Restoration Fund

- What drives restoration activity
- The Fund
- A brief history
- Spend and costs
- Environmental benefits and cost effectiveness
- Outputs: the projects
- Lessons learnt so far
- Future direction – Pilot Catchment; Restoration Regulations; Restoration Strategy

SEPA Restoration Driver - WFD and the River Basin Planning Process

- Water Framework Directive (2000) aims for all water bodies to be at good ecological status
- RBMP = planning process to ensure that water bodies reach good status **and** avoid deterioration
- Three cycles: 2009-2015, 2015-2021, 2021-2027
- Aim of 98% of water bodies reaching good status by 2027

The Scottish Restoration Fund

- The fund was set up in 2008 with money from the Scottish Government and SEPA
- Its aim is to finance the delivery of aquatic restoration on morphologically downgraded waterbodies identified through the RBMP process
- This is achieved through:
  - funding third party partnership projects
  - and by SEPA led projects
- The fund spend for the financial year (2011/12) was £1.1 million
- For the next 3 years £500K committed by SEPA. Combined with SG funds, there is likely to be at least a million each year in total

A brief history

2008/9

- Funding was reactive, focussed on fish migration and led by stakeholders

2009/10

- Has been part reactive but extending scope to a wider range of projects. Starting to direct investment towards strategic targeted projects e.g. barriers to fish migration

2010/11

- Has funded a multi catchment project to look at restoration options for morphologically degraded waterbodies in diffuse pollution priority catchments
- Has funded appraisals of impassable barriers for restoration options across the country
- Continues to fund third party projects

2011/12

- Half the fund goes to third party / external projects and half goes to SEPA led projects
- SEPA directs its spend to multiple strategic catchment scale initiatives, in part focussing on diffuse pollution priority catchments
- A more rigorous assessment process was developed along with clearer guidance on what we can and can not fund.

Projects - barrier removal

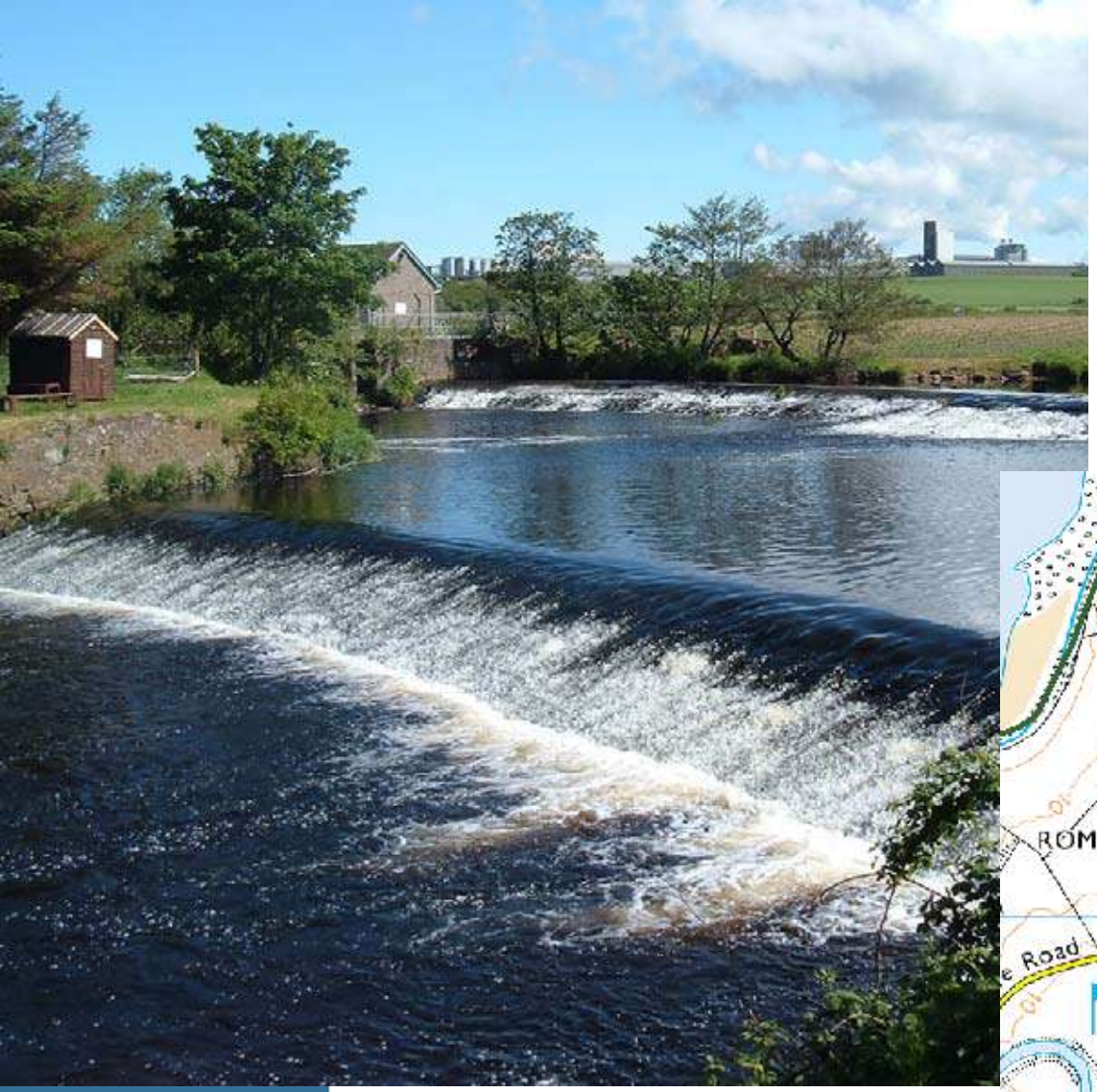
- Barrier works are currently the most common project application. Not the area of greatest spend yet though because most of the works tackled are relatively small-scale barriers. Some barrier works have allowed for a reasonable estimation of the extent of environmental improvement.

- As a result of 14 of the barrier projects funded to date current estimates indicate that 3052km of classified waterbodies now have improved fish access and/or habitat. This is from removal, fish pass installation or easement work. In many cases this will result in improvements in classification status.

- The delivery of these benefits equates to a spend by the fund of less than a £40 per kilometre.

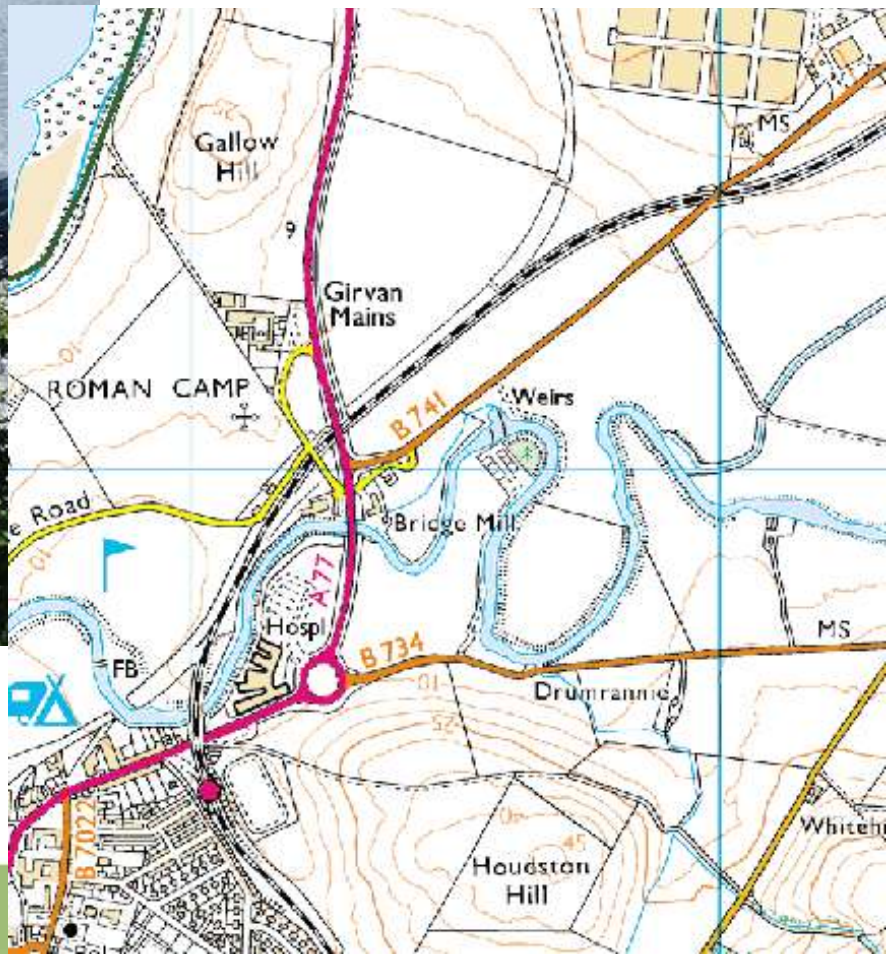
Barriers

- Two barriers on the River Lundy were indentified as a barrier to fish movement.
- The Fund contributed to both scoping of their removal and their actual removal.
- Removal phase of work done in partnership with Lochaber Fishery Trust and Forestry Commission. A low cost partnership project that has removed a pressure from the lower end of a significant catchment on the west coast.



Water of Girvan

- 2 impassable weirs
- WB id 10757 – moderate pressures include fish continuity



Water of Girvan

- 2 fish passes constructed
- Partners:
  - Ayrshire rivers trust
  - Girvan District Salmon Fishery Board
  - Atlantic aquatic resource conservation
  - SEPA
  - Landowner
- Total cost £20,000;
- SEPA contribution £10,000

Low cost restoration / enhancement

Projects – Riparian INNS Control

- The Fund currently supports 4 phases of riparian INNS control projects across 73 sub catchments and 13 different Rivers Trusts. The number of trusts, catchments / sub catchments, lengths and costs for these four projects are listed in the table below

Project Phases	No of Trusts	No of sub catchments	Approx length of river (km)	Total projected costs over 4 years (k)	Total fund request over 4 years (k)
Phase 1	6	18	196	313.8	132.2
Phase 2	6	31	220	519.4	208.4
Phase 3	4	9	357	314.2	128
Phase 4	3	15	410	632.4	176.6
Total	13	73	1183	1779.8	645.2

- Fund contributed 33% (£645k) of the funding for INNS projects. Total costs £1.78m. The additional funding for these projects comes from elements of match funding or in-kind contributions.

Projects- Riparian INNS Control

- These projects tackle Giant Hogweed, Japanese Knotweed, Himalayan Balsam and Rhododendron.
- All the Trusts use the same methods to tackle the plants but employ different resource approaches to the problem dependant on Trust, area and extent of volunteer labour. Much of this manual work is carried out by Trust staff and volunteers.
- Funds only cover the control of INNS (equipment, training, man power and reporting)
- The amount awarded equates to about £545 per km spend by the Fund over 4 years, or £136 per year per km.
- This work is currently unlikely to deliver large changes in WFD status but will increase the “capacity” within water bodies to absorb impacts upon morphology.

Riparian INNS Control

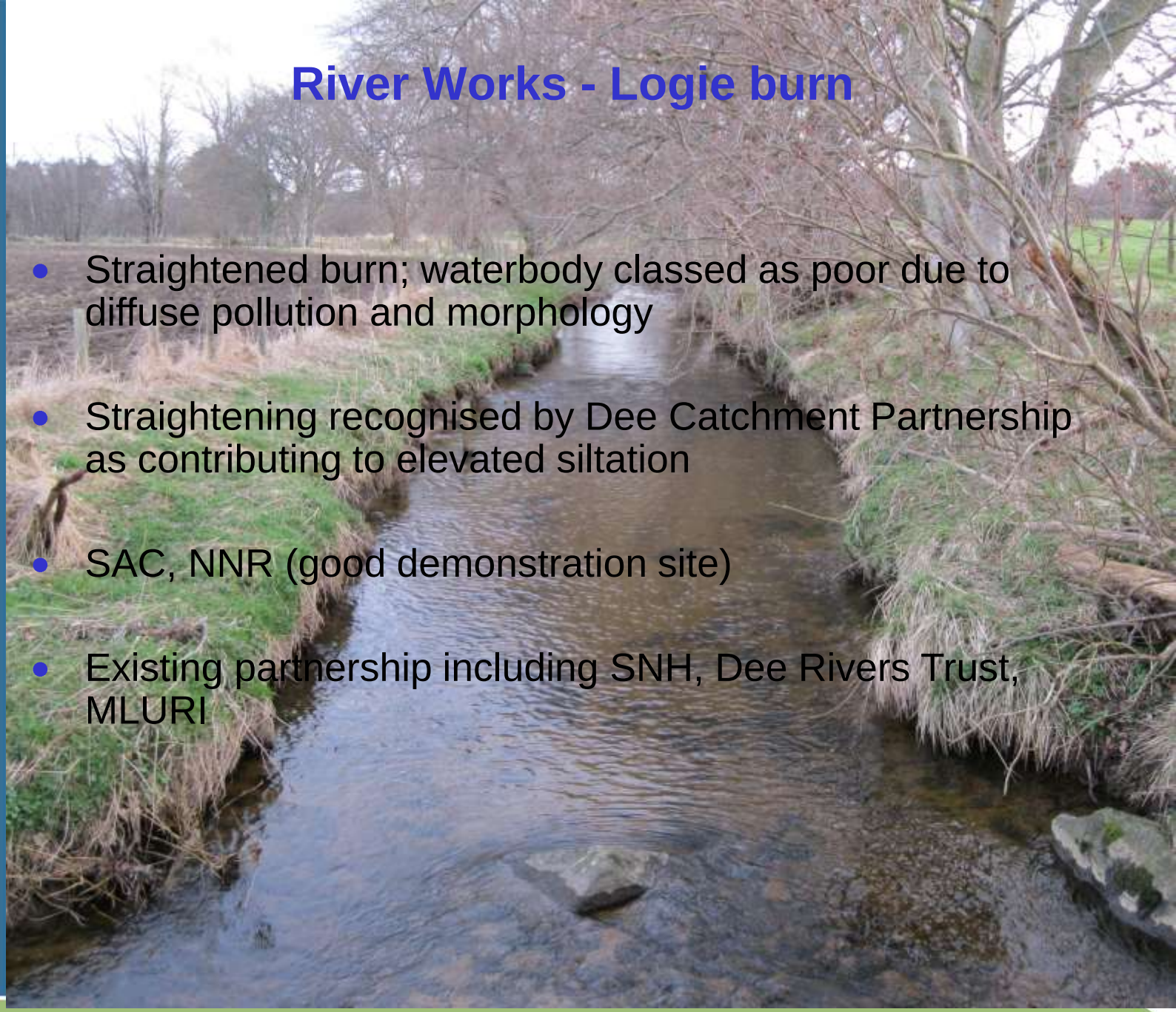
- Images from three years of treatment of Giant Hogweed on the River Ayr by the Ayrshire Rivers Trust can be seen below.

Year One

Year Two

Year Three

River Works - Logie burn



- Straightened burn; waterbody classed as poor due to diffuse pollution and morphology
- Straightening recognised by Dee Catchment Partnership as contributing to elevated siltation
- SAC, NNR (good demonstration site)
- Existing partnership including SNH, Dee Rivers Trust, MLURI

Logie burn

- Historical meanders visible
- Surveying showed meander sustainably intact, and blocked off by small amount of material

medium cost active restoration

Logie burn

- Works done by volunteers, contractor
- SEPA contributed £22000 total value of project £48000 most of £26000 value of partners contribution, work in kind

low cost active restoration

Funding lessons learnt

- Projects are driven and shaped by the funding and the conditions placed upon them.
- The more flexible and dynamic a funder can be the more successful a project can be
- A project can take years to move from conception to works on the ground. Restoration is not a quick process and spend/costings need to account for this.
- Scoping studies are often necessary before moving to full works projects but often more difficult to justify the spend on. However as public funder, the process needs to be transparent and scopes provide this transparency
- Project monitoring is vital. Funds must allow for this.

Funding lessons learnt

- Project match funding is difficult / nigh on impossible to find. Heavily reliant on in-kind but have to be careful applicants are not stretching the reality of their contributions
- Need to ensure no double funding issues with other sources of funding such as SRDP.
- An integrated funding mechanism would be the ideal but a long way of, if ever achievable.
- As a new fund it will take a few more years to build a good data base of projects, only then will we be in a position to even try determine cost effectiveness and environmental gain

Restoration and SEPA - Future

- Scottish Restoration Fund is secured for at least the next three years
- More large scale complex projects on the cards, with many more works projects ready to go in the next year or two
- Pilot Catchment
- Restoration Strategy
- Restoration Regulations