

Water Environment Fund Annual Report to Scottish Government April 2017 – March 2018

1. Introduction

- 1.1 This report summarises the outcomes of the Water Environment Fund programme of improvements to Scotland's water environment delivered by Scottish Government grant funding in 2017/18.
- 1.2 The Scottish Government granted £4,629,295 in 2017/18 for projects to improve the physical condition of Scotland's water environment. This report describes the environmental improvements resulting from this funding and delivered through grants to third parties, through SEPA directly commissioned projects, and by projects that are directly funded by Scottish Government but facilitated and monitored by SEPA.
- 1.3 Water Environment Fund and Scottish Government grants enabled progress on twenty-one projects across Scotland. The projects, detailed in Annex 1 will ultimately provide access to 158km of river length for fish migration and improve 4.4km of river length for morphology. Funding has also been provided for the development of options and designs to provide access to 360km of river length for fish and improve morphology in future years.

2. Environmental Improvements

- 2.1 Improving physical condition of urban rivers
 - Funding provided to City of Edinburgh and West Lothian Councils for the Almond barriers project. This catchment scale partnership will open up 298km of river length to migratory fish, upgrade the status of 12 waterbodies and improve passability at 7 key fish barriers in the watershed
 - Funding provided to Fife Council for an urban ground works project on the Lyne Burn. When complete this project will improve 1.2 km of river length and contribute to improving the waterbody to overall good status.
 - Funding provided to North Lanarkshire Council for design of the Garrel Burn project, which will upgrade one waterbody from poor to good ecological potential, improving 1km of urban watercourse and enhancing amenity and biodiversity.
 - Funding provided to the Tweed Forum, Fife and West Lothian Councils for scoping urban river restoration projects on the Biggar Water, Lochshot Burn and Back Burn. These projects aim to provide multiple benefits for NFM, access, connectivity, habitat and biodiversity.
 - Funding directly commissioned by SEPA to improve fish passage on the Calders Catchment Barriers; a project aimed at improving passability at a number of barriers to migration.

- 3.2 Improving rivers for fish migration
 - Avon water barriers phase 4 works completed for this project to open 100km of habitat to migratory fish and improve the status of 6 water bodies
 - Designs have been completed for the Garlogie and Diebidale Dam easements with works anticipated in 2019
 - The removal of Tarff Creamery Weir has restored fish access to 10km of river length and improved one water body to overall good status. Funding for bank reprofiling and minor riparian mitigation in 2017-18.
 - A barrier to fish passage has been removed at Morsgail on the Isle of Lewis. This has opened 3km of habitat to migratory fish and one water body will improve to overall good status. Funding for bank protection
 - Intrusive ground investigations complete for a fish pass at Sevenacres Weir which, when complete, will improve the ecological status of one water body to good for fish passage.
 - Scoping was completed on the Glazert Kirk Burn which identified that the project should not progress due to spatial rules.
 - Options development phase completed on the Gottar Water. Easement will open 9km of watercourse for fish passage.
 - Ground Investigations completed on Sevanacres Weir. Completion will open 39km of watercourse for fish passage
 - Support provided to City of Edinburgh and West Lothian Councils for the Almond barriers project. This catchment scale partnership will open up 298km of river length to migratory fish, upgrade the status of 12 waterbodies and improve passability at 7 key fish barriers in the watershed

3.3 Improving physical condition of rural rivers

- Ground works were completed for phase 3 of the Aberarder, River Nairn project. This project has created 2km of new channel and reconnected 30,000km² of wetland.
- Funding was provided for Landowner engagement, ground investigation, design and works for the Upper Nith. This project will improve 6.3km of river length, resulting in overall status upgrades from moderate to good (Nith).
- Phase 2 and 3 or works completed on the Pow Burn, directly improving 2500m of watercourse
- Detailed design was completed on the Laggan Burn. This project has now been paused following a re-prioritisation exercise.
- 3.4 Control and eradication of Invasive Non Native Species (INNS).
 - Removal, control or survey of INNS was undertaken by 2 fishery trusts with WEF funds contributing to treatment of over 344,000km² of Scottish riparian habitat.

3. State Aid

4.1 In 2017/18, the Water Environment Fund provided £24,178 of funding to third parties that could be considered state aid, *industrial de minimis* funding. Funding awarded as state aid *industrial de minimis* was notified to the applicant in the award offer letter using wording recommended by Scottish Government State Aid web page. SEPA records are kept; this funding does not require reporting to Europe.

4.2 The Agricultural Block exemption for the Water Environment Fund (SA41329) was notified on 6th May 2016. £10,000 of funding was awarded under the Agricultural Block exemption for the financial year 2017/18; this was reported to the European Union through the Scottish Government State Aid team.

Sarah Altman Water Environment Fund Unit

| Project name | Applicant | Costs – WEF contribution | Type – scope/design/ works | Summary of project/environmental improvement |
|----------------------------------|---------------------------------|-----------------------------|---------------------------------------|--|
| Improving urb | an rivers | | | |
| Lyne Burn | Fife Council | £343,039.61 | Works – Morphology improvements | Scoping of entire River body completed in 2015/16. Partnership with Fife Council via a Memorandum of Understanding. Project will ultimately result in status upgrades for 1 water body, and the restoration of approximately 1.2km of urban water course. |
| Garrel Burn | North Lanarkshire Council | £570,000 | Design | Design of river restoration reach and wetland restoration project. This is a partnership project between North Lan. Council and SEPA, facilitated by a joint MoU. Restoring the burn will improve 1 km over river channel, and upgrade one waterbody from poor to good ecological potential. |
| Biggar Water | Tweed Forum | £29,250.00 | Scoping | Statement of requirement tender is being prepared to look at full suite of measures and ensure a catchment approach is taken. Potential to link NFM measures upstream and downstream via WEF measures in the urban stretches through Biggar. Opportunity areas have been identified but estimates of km improved still to be finalised. |
| Back Burn | Fife Council | £32,500.00 | Scoping | Partnership with Fife Council through MoU. A statement of requirement tender being prepared for feasibility and scoping of 6km of the Back burn to improve current status (poor ecological potential) and provide multiple benefits for NFM, access, connectivity, habitat, biodiversity. Money being spent on contracting consultant to undertake the feasibility and scoping. |
| Lochshot Burn | West Lothian Council | £9,550.60 | Scoping | Part of the wider Livingston Blue-Green network scoping project. Consultant's report will be completed, which will also incorporate the findings of a public consultation. Lengths to be improved still to be finalised. |
| Calders Catchment Barriers | SEPA | £21,753.56 | Scoping | South Calder barrier walkover survey carried out by external consultants. Report produced which maps barriers and assesses passability. Will be used for future barrier work in the catchment. Potential habitat to be made accessible still to be confirmed. Other pressures are physical condition and Water Quality. |

| | rs for fish migration | | | |
|-------------------------------------|--|-------------|---------------------------|---|
| Sevenacres Weir | Ayrshire River Trust | £27,665.60 | Works– fish barriers | Intrusive ground investigations for a two flight Larinier fish pass at Sevenacres weir. Completion that will open up over 39km of river including 18km of good habitat to salmonids. Together with actions at Garden weir, ecological status for fish barriers will be raised to good. Collateral warrantee obtained from the design consultants and Landowner agreement now in place. Works are programmed for completion in August 2018 |
| Morsgail | RAFTS | £6,224.00 | Works – fish barriers | In 2016 a fish barrier was removed, a flood in summer 2017 damaged the bank. Remedial Works 2017 stabilised the banks. |
| Tarff Creamery Weir | RAFTS | £2,310.00 | Works – fish barriers | Works complete to remove a barrier to allowing fish to access 10km of river and this will achieve the WFD objective of reaching good ecological potential in the Tarff waterbody. |
| Avon Water Barriers – Phase 4 | RAFTS | £277,823.66 | Works – fish barriers | Works completed for this project in 2017/18 to open 100km of river habitat to migratory fish and improve the status of 6 water bodies. Post construction defects identified at Millheugh Weir require remedial work during 2018/19. |
| Diebidale Dam Easement | Kyle of Sutherland Fisheries Trust | £3,459.44 | Design – fish barriers | Completion of surveys and outline designs in preparation for full dam removal. Removal of the dam would allow access for fish into 5km of high quality habitat upstream. The waterbody would improve from poor to good Ecological Status as a result of this work. |
| Glazert Kirk Burn | SEPA | £6,810.00 | Scoping | Scoping identified that only 1km habitat would be opened up by fish passage at the weir. Spatial rule requires >1.5km to be opened up. No further work by WEF Unit. East Dunbartonshire Council, who were project partners, have been advised. |
| Lower Tyne barriers | SEPA | £59.40 | Engagement | Funding for hall hire for a community engagement workshop in preparation for developing projects on 3 barriers with the aim of ecological improvements across 10 WBs in the River Tyne catchment. |
| Garlogie Dam | The River Dee Trust | £150,000.00 | Design | The River Dee Trust is taking the project forward in 2018 with completion of works expected in 2019. |
| Gottar Water | SEPA | £34,665.72 | Options | Single option development phase completed, confirming partial lowering and pre-weirs as preferred option. This built on previous full- spectrum optioneering phase. Easement will open 9km of upstream habitat and upgrade overall classification from moderate to good (this weir is the only pressure in the catchment). |

| Improving physical condition of rural rivers | | | | | |
|--|-----------|-------------|------------|---|--|
| Aberarder – | Aberarder | £231,991.26 | Works | — | Created 2km of new channel, restored 2km of channel, reconnected |
| Phase 3 | Estate | | morphology | | 30,000m2 of floodplain wetland. This will improve the waterbody from |

| | | | improvements | poor status to moderate. |
|----------------------|--------------------------------------|---------------|---|--|
| Pow Burn | Esk Rivers and Fisheries Trust | £213,875.06 | Works – morphology improvements | Phase 2 (completed May'17) and Phase 3 (completed in Sept'17) of the works phase of the Pow Burn directly improved 2500m of river extending the 400m of works on Phase 1 (completed Sept'16) This has moved the water body from bad to moderate status. |
| Nith – Upper Nith | SEPA | £5,010.00 | Landowner engagement – morphology improvements | The 6 km restoration project is part of SEPA's pilot catchment project which is a strategic catchment scale approach to restore watercourses bringing about improvements for morphology and natural flood management. Future works are expected to improve the water body |
| Nith – Upper Nith | Nith DSFB | £90,578.58 | Design – morphology improvements | from poor to good. Significant progress has been made in development of designs, completion of ground investigations gearing up for the works phase with a new delivery partner. |
| Nith – Upper Nith | Tweed Forum | £58,890.00 | Ground Investigation – morphology improvements | impacts of a landowner withdrawing from the project have also been managed this year. |
| Nith – Upper Nith | Tweed Forum | £1,000.000.00 | Works– morphology improvements | |
| Nith – Scar Water | SEPA | £106,088.40 | Design – morphology improvements | The restoration project was part of SEPA's pilot catchment project which is a strategic catchment scale approach to restore watercourses bringing about improvements for morphology and natural flood management. Detailed design of 6.4Km of the River Nith and Scar Water completed to improve ecological status of the Scar Water from Bad to Poor and to achieve Natural Flood Management through increased flood plain storage. We have used a break clause in the contract to pause the project prior to works, this is in line with the reprioritisation of physical condition improvement projects. However SEPA have agreed to fund a SRDP application in 2018/19. |
| Laggan Burn | Nith DSFB | £66,730.24 | Design – morphology improvements | Detailed design of 3.21Km of the Laggan Burn for environmental improvement of morphological condition and poor to moderate ecological status. The other objective to achieve Natural Flood Management through increased flood plain storage. We have used a break clause in the contract to pause the project during design this in line with the reprioritisation of physical condition improvement projects. |

| Other works | | | | |
|----------------------|--------------------------------|---------------|---------------------|--|
| Tweed INNS | Tweed Forum | £9,422.05 | INNS control | WEF monies add to a fund created from a variety of sources. All watercourses with presence of Giant Hogweed have been surveyed and controlled where appropriate: Tweed, Leet, Whiteadder, Till, Teviot, Ale, Eye and Gala. Approximately 70,000 km ² has been treated. All watercourses infected with Japanese knotweed have been treated (Tweed, Whiteadder, Till, Teviot, Ale, Ettrick, Yarrow, Lyne, Eye, Leithen, Eddleston) - approximately 20,000 km ² has been treated. Some work with skunk cabbage has started – liaison with SNH is underway |
| Forth INNS | River Forth Fisheries Trust | £8,000.00 | INNS control | Giant Hogweed treatment on the Allan Water, River Almond, Gogar Burn, Kilconquhar burn, River Teith, Water of Leith and the River Tyne by volunteers. Contractor/Trust spraying River Carron and its tributary Bonnywater/Red burn - approximately 200,000 km ² treated. Japanese knotweed treatment on River Almond, Brox burn, River Avon, River Forth, River Teith, Water of Leith and Allan Water by volunteers. Contractor/Trust spraying River Carron and its tributary Bonnywater/Red burn. Overall approximately 54, 000 km ² treated. |
| Glazert Ecocolife | SEPA | £8,489.25 | Resource support | This project was paused during 2017/18 due to joint funding to be arranged by the East Dunbartonshire Council. SEPA await a decision. EDC funding approval decision expected May 2018. Work on 5km section of the river. Ecoco life resource was used for alternative sites scoping which has resulted in the Ecoco life funding and project officer time moving to Knowes Weir In October 2017. |
| Compensation | Carcary Farms | £774.60 | Land compensation | This compensation was applied for as part of the Pow Burn river corridor restoration project reported on above |
| Compensation | South Esk Farms | £3,335.06 | Land compensation | This compensation was applied for as part of the Pow Burn river corridor restoration project reported on above |
| TOTAL | | £3,318,285.99 | | |

Table 2: Detail of projects facilitated and monitored by the Water Environment Fund, but directly funded by Scottish Government 2017/18

| Project name | Applicant | Costs – SG contribution | Type – scope/design/ works | Summary of project/environmental improvement |
|---|---------------------------------|----------------------------|----------------------------------|---|
| Improving rive | ers for fish migration | 1 | | |
| Almond barriers – Fair A Far Weir | City of Edinburgh Council | £595,010 | Works | Almond barriers is a catchment scale project opening up 298km of river to migratory fish, improving the status of 12 waterbodies and engaging local communities by tackling 7 key fish barriers in the watershed. |
| Almond barriers – Kirkton Weir | West Lothian Council | £253,850 | Works | |
| Almond barriers – Rugby Club Weir | West Lothian Council | £129,540 | Design & Works | |
| Almond barriers – Howden Bridge Weir | West Lothian Council | £332,610 | Design & Works | |
| TOTAL | · | £1,311,010 | | |