



Rivers and Burns Action Plan

Scottish Biodiversity List habitat: Yes*
UK Biodiversity List of Priority Habitats: Yes

Summary

Rivers and burns are frequently the sole remaining semi natural feature in a landscape, and as such they are invariably of great value for wildlife, and our own enjoyment. On the whole our rivers and burns represent the most unmodified natural habitat after our bogs to be found in North Lanarkshire. Their importance is increased by the fact that much of our ancient woodland is found along their banks. Their value as “wildlife corridors” is increasing as development covers more and more land.

The quality of our rivers and burns has improved greatly since the closure of most of the heavy industry, however there is a great deal of scope for further improvement.

There is a UK Biodiversity Broad Habitat Statement for Rivers and Streams.

Habitat Profile

In their natural state watercourses are dynamic environments, creating a range of physical habitats which will be determined by factors such as slope, discharge, water velocity, and substratum (hard/soft geology etc.). The habitats created by these factors will support characteristic animal and plant assemblages. In general, the more diverse the range of physical habitats, the more biological diversity there will be. Engineered rivers (in urban areas and industrial or intensively agricultural landscapes) generally have a simplified range of habitats and a reduced biodiversity.

Rivers and burns are impacted by reductions in water quality, quantity, changes to their flow regime, and degradation of the physical structure of their banks and channels. Two aspects of rivers should be considered: the watercourse itself - the ‘wetted channel’, and the complete corridor of channel and riparian zone (bank and associated land). The linear nature of streams and rivers gives them value beyond their immediate provision of living space for wildlife: they also provide wildlife corridors enabling animals to move to new areas safely to find food, mates, or new habitat. Culverts, bridges, weirs, hard engineering of channels, as well as poor water quality and low flows, threatens this continuity, isolating populations which can lead to their extinction.

Water quality is of some significance to truly aquatic species, although river corridors may retain considerable value to wildlife even where water quality is severely impaired. This is related to their retention of some semi-natural features, for example their riparian vegetation or their production of flying stages of aquatic insects, which are utilised as food. Therefore, poor water quality should not lead to pressures for culverting, as this leads to total loss of the habitat and compounds any water quality problems.

There is a growing recognition of the importance of river habitats both as the supporting physical structures for wildlife, and as key components conferring resilience of the system as a whole, for example enabling polluting materials to be processed and rendered harmless. These latter areas of activity are not covered by



current legislation and therefore demand a co-operative approach from all interested parties to achieve effective management.

Legal Status

The Water Framework Directive establishes a legal framework for the protection, improvement and sustainable use of all water bodies in the environment across Europe. That is, all rivers, canals, lochs, estuaries, wetlands and coastal waters as well as water under the ground.

The Directive became law in Scotland during 2003 through the Water Environment and Water Services (Scotland) Act 2003 (the WEWS Act) which sets out the new arrangements for the protection of the water environment in Scotland.

The main environmental objectives are to protect and improve Scotland's water environment. This will include preventing deterioration of aquatic ecosystems and, where possible, restoring surface waters and groundwater damaged by pollution, water abstraction, dams and engineering activities.

The Act provides for new controls over activities such as abstraction, impoundment, engineering, point and diffuse source pollution which directly affect the water environment. These controls will be implemented by the Controlled Activities Regulations. The Act also states that SEPA will be the operator of these regulatory regimes.

Water Environment (Controlled Activities) (Scotland) Regulations 2011 –known as the Controlled Activity Regulations (CAR) – and their further amendments apply regulatory controls over activities that may affect Scotland's water environment. These include discharges of wastewater or industrial effluent, and abstractions for irrigation, hydropower or drinking water, as well as engineering activities in or near rivers.

Current Status

Scotland has more than 125,000 km of rivers and streams (enough to go round the earth three times) varying from small highland burns to deep, wide lowland rivers such as the Tay. There is also a 220 km canal network in Scotland.

There are approximately 89 rivers and burns in North Lanarkshire, two main canals and 35 lochs and reservoirs. Rivers and burns form linear corridors of varying conservation value across North Lanarkshire. However, there is only one river catchment contained completely within the boundaries of North Lanarkshire, the South Calder Water. Other catchments lying partly within North Lanarkshire include the North Calder Water, the River Kelvin, the River Almond and a short stretch of the River Clyde.

Prior to the industrial revolution all of our waterways would have been clean, clear and teeming with life. The quality of the South Calder Water has improved dramatically with the closure of the Ravenscraig steelworks. Also, water quality in the Kelvin catchment has improved with the diversion of sewage treatment works discharges to the Kelvin Valley Sewer.



In the SEPA waterbody classification data 2020 (overall status) the majority of North Lanarkshire's rivers and burns are classified as poor to moderate. With several scoring good – Garnkirk Burn, Forth & Clyde Canal and at least in part the river Clyde (area from Motherwell to Garrion Bridge). One is classified as bad – river Kelvin,

Current Factors Affecting This Habitat

The main pressures currently affecting the condition of rivers and lochs in Scotland are:

- Man-made barriers to fish migration
- physical changes to the beds and banks
- rural diffuse pollution.

Groundwater quality is affected by:

- Diffuse pollution from rural sources
- discharges from industries such as mining and quarrying.

Groundwater flows and levels are affected by:

- Agricultural irrigation
- industry.

- **Physical Habitat Destruction and simplification**

Works such as culverting, dredging, inappropriate hard engineering, and land take for development. Rivers are also affected by agricultural practices (e.g. overgrazing of stream banks).

- **Poor water quality**

This falls within the statutory remit of SEPA. Most problems can be rectified given adequate resources, both for identification of the problem and cost of rectification. Urban areas are traditionally difficult to deal with due to complexity of drainage network, multiple sources of pollutants and diffuse pollutants.

- **Non-native species and species with an affinity for rivers.**

May be self-colonising such as Giant Hogweed, Himalayan Balsam (a major problem on the Clyde, North Calder and Luggie Water) and Japanese Knotweed, or may be planted as an environmental 'improvement', e.g. cultivated grass species mown right to the riverbank, non-native ornamental species planted for amenity.

- **Public attitudes to river corridors.**

These may be seen as 'waste ground' if not maintained as parkland or amenity open space. Hence, they are frequently used as dumping grounds; fly tipping is a major problem locally.



- Water quality on council managed sites could be improved by encouraging the establishment of bank side vegetation, improved litter removal and appropriate land use.

Current Action

- Scottish Environmental Protection Agency’s monitoring of water quality at selected sites locally.
- Native planting along rivers and burns in any Council landscape projects.
- Continued enforcement of pollution control legislation.
- The promotion of SUDS and Green Roofs by Community Greenspace to planners and developers.
- The Council’s Biodiversity Team are consulted on relevant planning applications concerning development near rivers and burns – buffer between the watercourses and development also pollution prevention measures
- Promotion of wildlife friendly Sustainable Urban Drainage Systems in new developments
- Many parts of North Lanarkshire’s watercourses designated as a SINC.
- SEPA water quality targets
- Recently completed landscape project in Kilsyth to help flood prevention and re-naturalise a canalised area of water at the Garrell Burn. This has created much needed wetland habitat within Dumbreck LNR. This project also includes fish passes, creation of habitat for several wetland species such as water vole and otter. INNS survey and treatment within the same area.
- Project to survey for INNS along the Luggie Water within the Cumberland catchment area – in order to facilitate a further project to treat the INNS
- Project to survey for INNS along the upper regions of the Garrell Burn from the Kilsyth project and follow-on treatment.

Proposed Objectives, Targets and Actions.

Objectives

1. To protect and enhance the river and burn habitat associated riparian features, and water quality.
2. To increase public awareness of the wildlife and amenity value of rivers and burns.

Action	Meets objective number	Action by	Target
Policy and Legislation			
1.1 Develop policies to control INNS species and favour establishment of appropriate native species adjacent to rivers and especially on Council owned land.	1	SEPA, NLC,	By end of 2025
Habitat management and protection			
2.1 Promote soft engineering of rivers and presumption against culverting. Through Supplementary design guidance.	1	SEPA, NLC	Provide information through supplementary design guidance by end of 2023.
2.2 Continue to ensure that where appropriate, locally sourced native plant species are used for council planting operations and new developments where it is necessary to impinge on river banks.	1	NLC	Provide specific guidance 2023.



Generally, no development or works are recommended within 6m of a river, unless these will have a positive effect on the habitat.			
2.3 Promote adoption of Sustainable Urban Drainage Systems in new developments	1	SEPA, NLC	Include promotion of SUDS in new Supplementary Design Guidance. 2023
2.4 Identify opportunities for river restoration such as de culverting key sections of river corridors to allow better movement of biodiversity species.	2	NLC, SEPA	Identify 2 key sites and agree implementation with SEPA to be completed by 2024
2.5 Develop fish passages/ ladders to facilitate movement of fish through obstructions.	2	NLC, SEPA, CRF	Identify a key site and agree implementation with SEPA to be complete by 2025
2.6 Develop a strategy and identify funding opportunities to deal with the spread of invasives through water courses.	1	NLC, SEPA,	Identify a catchment scale project with SEPA and agree implementation by 2025.
Survey research and monitoring			
3.1 Continue to monitor the quality of streams and burns in North Lanarkshire	1	SEPA	Annual monitoring of streams and burns, report provided to Biodiversity Officer.
Communication and awareness raising			
3.2 Promote clean-up campaigns to educate local communities on the effects of general litter, fly tipping and sewerage debris on their local environment and wildlife.	1, 2	NLC	2 clean up events annually. Strategic promotion of NLC Freshwater habitats and species at events.
3.3 Establish links with LBAP topic groups from other council areas to ensure an integrated approach to habitat improvements in catchments crossing local authority boundaries.	1, 2	SEPA, NLC	Annual meeting organised by 2023.

Update by Kirsty Mooney Biodiversity Projects Officer, NLC, 2022.

***Although burns are not specifically mentioned in the Scottish Biodiversity List, rivers are included.**