

Liverpool City Region Ecological Network

Nature Improvement Area focus area

NIA Focus Area 08: Bridgewater Canal, Keckwick Brook and Runcorn Ancient Woodland Corridor

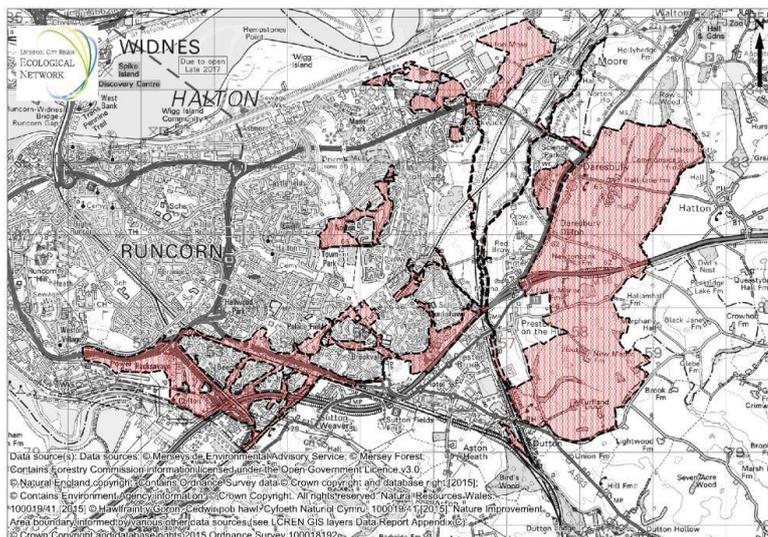
District(s): Halton

Area 1,004 hectares

Ecological priorities are:

Habitat creation

- Woodland, specifically around the existing ancient woodlands and hedgerows connecting woodlands; and
- Wetlands including rivers and the canal, supporting the existing habitats such as swamp, open water and ponds.



Habitat management

- Maintaining Flood Brook Clough and Red Brow Cutting SSSIs in favourable status;
- Maintaining and enhancing the existing ancient woodlands and enhancing the semi-natural woodlands;
- Enhancing the watercourses such as Keckwick Brook, including sustainable storage of surface water;
- Maintaining the extent and increasing the species diversity of the existing grasslands; and
- Maintaining and strengthening the habitat links through the urban landscape.

Existing ecological features:

1. There are 333ha of existing habitat.
2. Core Biodiversity Area: 2 SSSIs; 3 LNRs; 24 Local Sites; together with 11 ancient woodlands, and woodland, wetland and grassland Priority Habitats.
3. Linear features: Canal; railway; and roads.
4. Species: brown hare; amphibians; bats; farmland birds (yellowhammer, lapwing, grasshopper warbler).



Big Wood and Bridgewater Canal, The Woodland Trust

Focus area description:

The Focus Area is drawn around the existing ecological assets in Runcorn, such as the ancient woodlands that are dispersed through the urban area and which connect with larger areas within Cheshire. This is one of the largest areas of ancient woodland within the City Region. There is also a string of important wetland and grassland sites along Keckwick Brook, which connects the Mersey Estuary with rural Runcorn, Cheshire and the Bridgewater Canal that runs towards Manchester and also the Trent and Mersey Canal.

As part of the Runcorn New Town layout, there are significant areas of new and retained open space and planted or semi-natural woodland throughout the urban area. The roads are also lined with woodland and grassland. The woodland links and road corridors are important as they link the existing ancient and other important woodlands. Keckwick Brook and the Bridgewater Canal also run through the urban environment and add to the habitat links. Maintaining and strengthening these linking linear features is very important.

The Focus Area east of Runcorn is predominantly within the agricultural land and greenbelt. The area is characterised by having pockets of woodland spread across the landscape connected by hedgerows and tree lines. The area around Daresbury and Sandymoor is proposed for housing development and employment land; it is one of the key areas for the City Region.

Ecological opportunities

Habitat creation:

- **Woodland:** Planting woodland around the existing ancient woodland would buffer the important sites and allow species populations to be more resilient and expand into the new woodland. The existing woodlands are separated by roads and development. Woodland or hedgerow planting that links and strengthens links between the ancient woodlands would also enable species to move across the area. Planting could fill in gaps, such as at Rocksavage, or could create woodland belts to connect woodlands across longer distances.
- **Hedgerows:** The woodlands in the east of the Focus Area are dispersed across the landscape. Ancient woodland is present at the north, including in Warrington, and the south including in Cheshire West and Chester. Creating new hedgerows and tree lines that connect the existing woodlands would create a landscape that woodland species can move across.
- **Rivers and Bridgewater Canal:** The brooks are heavily modified and there is limited potential to alter this. The canal is in active use for navigation which it is important to maintain. Priorities include introducing in-channel habitat variation and removing artificial banks, which can be replaced by green engineering solutions to maintain the function of the watercourse. This would encourage more species in the watercourses and improve the ability for species to move along the habitat corridors.
- **Wetland:** The river corridors are narrow and wetland creation, as part of flood defence works, has been undertaken in the Daresbury and Sandymoor area. Opportunities to expand these areas out from the watercourses are limited but could provide multiple benefits including surface water storage and water filtering.
- **Ponds:** A network of ponds is present in the agricultural land of the Focus Area. Creating more would support the existing and improve habitat for important species, such as dragonflies and amphibians. Ponds provide the opportunity to create wetland habitats

within the urban landscape in small areas discrete spaces, especially where the Focus Area is narrow and to maintain the existing land use.

Habitat management priorities:

- **Woodland:** Areas of the woodland resource are within public and third sector ownership. There is some management that ranges from amenity to some habitat works. Within the ancient woodland, management should be targeted to ensure that there are key features present such as deadwood, mature trees and a diverse ground flora. Management could enhance the structure of the woodland to allow species to move across the area and populations to expand from the ancient woodland sites. Habitat works that create glades/rides, increase the amount of deadwood, and encourage mature trees would benefit these woodlands. Improving the structure of the woodlands by ensuring there is a suitable scrub layer and ground flora will also improve the ecological value.
- **Rivers and Bridgewater Canal:** The river corridors are narrow in places and are managed for flood defence, the Canal is managed for navigation. A maintenance programme that is sensitive to ecology, such as rotational bankside cutting, is important to maintain flood defence/navigation and deliver ecology improvements. Maintaining the diversity of habitats, including trees, grassed banks and emergent vegetation is vital to support important species, such as water vole and feeding bats. Dense vegetation is present in areas and this limits the species diversity on the banks and within the watercourse. Removing small areas of dense vegetation would allow more species to establish.
- **Ponds:** The ponds within the Focus Area are important for invertebrate and amphibian populations. Management to prevent complete shading by trees and drying out is required. A mixture of ponds in different conditions, such as completely open - some shading – complete shading, provides a range of habitat diversity. Protection of ponds from pollution inputs, such as nutrient enrichment, is important to ensure the habitat can support important species.
- **Wetland:** Sites such as Norbury Wood and Marsh and the flood defence features along Keckwick Brook are the prime areas of wetland. Scattered patches of swamp habitats also exist along the rivers and canal. Management of the existing swamp should maintain the extent and prevent too much scrub growth, but maintain some scrub as wet woodland. Some areas may require cutting to prevent drying out. Any cutting should be undertaken on a rotational basis.
- **Grassland:** Some areas of grassland are present within the Focus Area, mainly within the LWSs. Management to maintain the extent and improve the species diversity, such as annual cutting or grazing, would be beneficial. Some existing grasslands are managed as amenity grassland such as around Murdishaw. A number of grassland areas are within public ownership. Changes in management, such as reduced cutting regime or introducing species would help new areas of species rich grassland to develop and help strengthen habitat links through the urban area.
- **Hedgerows:** Traditional management of the hedgerows, such as laying, would strengthen the structure. Measures such as filling gaps in existing hedges and cutting every 3 years would improve the function of the hedgerow. Planting and allowing large tree species to grow tall would provide a diversity of height and expand the tree cover of the area. Hedgerow management allows the existing agricultural uses of fields to be maintained

while providing significant improvements to important habitats.

Ecosystem Services Benefits

The Focus Area's watercourses, wetlands and floodplain areas act to store water. Improvement in the function of the habitats would help to store more water, while further habitat creation could add to the storage capacity. This helps to make properties and land more secure inside and outside the Focus Area and is linked to property values. Keckwith Brook is in poor condition under the Water Framework Directive, while the Bridgewater Canal is in overall good condition. Wider opportunities at a catchment scale, such as beneficial land management change and upstream flood storage, could also play a part in ensuring there is no increase in the level of flood risk in Keckwith Brook area.

Management of the woodlands, in particular, could provide economic opportunities in relation to renewable energy and microgeneration through biomass. Existing woodlands act as a carbon store and any new woodland would also help to store carbon. In line with The Mersey Forest Plan, the creation and management of appropriate habitats, such as woodland including wet woodland and grasslands, could provide a quality landscape setting for new development.

Focus Area support to wider priorities and strategies

Local Plans – The local authorities in the City Region have worked together to prepare the LCR Ecological Network as a joint evidence base and to help plan for biodiversity at a landscape-scale in line with the National Planning Policy Framework. Discussions with neighbouring areas through Nature Connected, the Government-recognised Local Nature Partnership, have enabled wider connections beyond the city region to be made. In line with paragraph 117 of the National Planning Policy Framework, the LCR Ecological Network includes a Core Biodiversity Area of designated nature and geological sites and Priority Habitats, linking networks and strategic priorities for habitat creation or enhancement. This is one of seventeen Nature Improvement Area Focus Areas which together make up the LCR Nature Improvement Area. Although not a Proposals Map designation, further refinement of NIA boundaries and land uses may occur as part of each district's Local Plan processes.

Catchment Flood Management Plans – the ecological opportunities could be used to store flood waters and release them slowly. This is in line with the approach the Environment Agency is taking to deal with flooding along the Keckwick Brook.

River Basin Management Plans (Water Framework Directive) - the ecological opportunities would help to deliver improvements to water quality and morphology. This would help improve the ecological condition of the watercourses.

Mersey Forest Plan – woodland and hedgerow creation is in line with Policies for this area in the Plan. The protection, expansion and management of other habitats is a Plan wide policy which the ecological opportunities would help to deliver.

National Character Areas –the ecological opportunities are in line with the four 'Statements of Environmental Opportunity' identified in the Mersey Valley NCA 60 profile. Delivery of the Focus Area ecological opportunities would strengthen landscape resilience and adaptation to climate change. This would help the Character Area achieve sustainable growth and a more secure environmental future.

Countryside Stewardship scheme – The scheme could support land managers in the delivery

of multiple public benefits. Overall, biodiversity should be the priority for the scheme but synergies also exist to maximise opportunities to deliver biodiversity, water quality and flooding benefits. The scheme could also contribute towards the delivery of our water quality objectives.

Nature Connected and Cheshire LNP – implementation the Focus Area’s ecological opportunities would work towards the LCR LNP’s Key Action D and would also support the delivery of its other Key Actions. They would also contribute to the ‘living landscape’ proposals of Cheshire LNP.

LCR LEP – The Focus Area could help to support the expansion of Sci-Tech Daresbury Park and enterprise zone, by contributing towards sustainable development and the green spaces creating a productive working environment. The ecological opportunities could help support the LEP’s Priority for Low Carbon Economy through woodland management. The Focus Area could also support the LEPS’s Priority for Knowledge Economy and Skills by enhancing and inspiring learning for school and higher education students, including work placements/training in the natural environment.

Atlantic Gateway - the NIA ecological opportunities fit with the investment opportunities of infrastructure through flood control and sustainability.