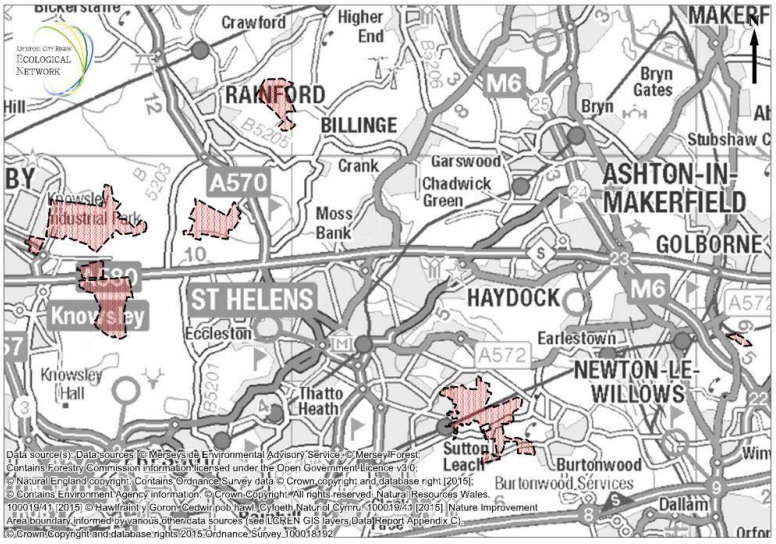
# Liverpool City Region Ecological Network
# Nature Improvement Area focus area

## NIA Focus Area 05: Knowsley and St. Helens Mosslands

District(s): Knowsley and St. Helens

Area 666hectares

**Ecological priorities are:**




**Habitat creation**

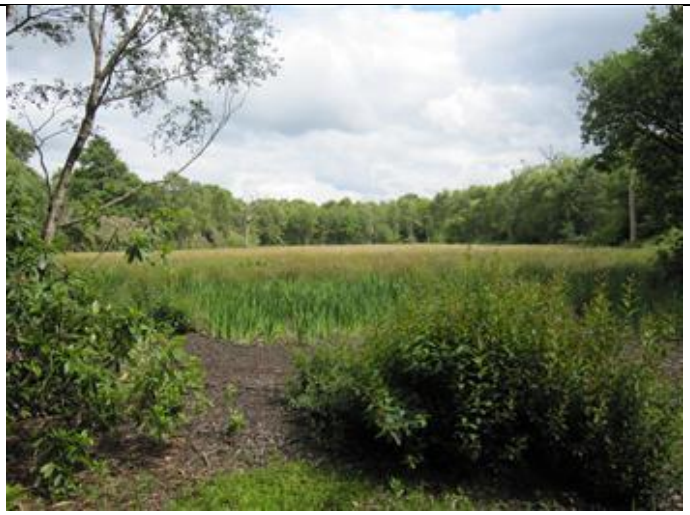
- Wetlands, specifically lowland bog and fen on areas that contain degraded/drained peat; and
- Wet grassland and wet woodland.

**Habitat management**

- Manage the small areas of lowland bog that remains, including Kings Moss and Acornfield Plantation;
- Manage the existing woodlands that are planted on degraded peat to allow lowland bog species to establish;
- Maintaining the extent and enhancing the species diversity of existing grasslands, ponds, ditches and other wetland habitats present;
- Maintaining the extent and enhancing the condition of habitats used by breeding and wintering birds; and
- Manage recently planted woods to encourage them to develop into natural woodlands.

**Existing ecological features:**

1. There are 476ha of existing habitat.
2. Core Biodiversity Area: Highfield Moss SSSI; 2 LNRs; 13 Local Sites; together with grassland, woodland, wetland and heathland Priority Habitats.
3. Linear features: Rivers; ditches; railway lines; and roads.
4. Species: Pink footed goose; water vole; red squirrel; brown hare; farmland birds (e.g. grey partridge, sky lark and lapwing).



Acornfield Plantation, Philip Hurst

**Focus area description:**
The Focus Area has been mapped tightly to the existing ecological features on the predominantly degraded peat. By drawing the boundary of the Focus Area tightly, risks to existing agri-businesses have been minimised and the habitat creation and management opportunities reflect the actions that landowners have been undertaking in the Focus Area. The Focus Area is building on this activity.

The remaining sites with peat present are spread widely across Knowsley and St. Helens. Historically, the area would have had extensive lowland bog habitat, which has been drained and ploughed for agriculture. Drains are present and are used to lower ground water levels to allow the land to be cultivated.

Many of the remaining peat sites are now woodland plantations of pine with extensive rhododendron present, surrounded by agricultural land. The Focus Area also contains a number of former lowland bogs that have been altered by industry. These still contain small remnant bogs and are now also important for other habitats.

The farmland associated with the Focus Area has a very high diversity and abundance of breeding birds, including many rare or threatened species. It is important as a supporting habitat for feeding wintering birds that are qualifying features of the coastal designed sites, including pink-footed goose.

**Ecological opportunities**

**Habitat creation:**

- **Lowland bog/fen:** This is the biggest priority for habitat creation, and it is accepted that it is likely to be the most difficult. Any opportunities to re-wet the peat and allow lowland bog to regenerate are important. Areas such as Kings Moss Plantation/Kings Moss, Reeds Moss/Moss Plantation and Colliers Moss are known to be wet; further wetting may be easier to achieve on those sites. The condition of Highfield Moss SSSI is affected by drainage, rewetting the neighbouring field could help protect the SSSI. Kirkby Moss area has been heavily modified and the peat destroyed. It contains a large number of drains that were installed to drain Simonswood Moss, West Lancashire but now peat extraction has finished it may be possible to block these drains and produce fen habitats in Kirkby Moss. This would complement the restoration of Simonswood Moss across the administrative boundary in Lancashire.

- **Wet grasslands:** Species rich grasslands would complement the existing habitats and could be used as to buffer important sites including re-wetted areas of peat. Wet grasslands could be created where there is existing flooding or by re-wetting fields. Small habitat areas could be created where water pooling already occurs. The Focus Area is important for a large number of priority bird species that have been recorded breeding, including lapwing, curlew and grey partridge. Grassland creation aimed at improving the breeding success of the farmland birds would be a significant contribution to the Focus Area priorities. Grassland creation would also benefit meadow pipits and would provide breeding opportunities for cuckoo, which has a breeding stronghold around Brown Birches.

- **Wet woodland:** There are limited areas of wet woodland due to drainage. Some of the existing woodlands could be re-wetted and wet woodland created. This would retain the sites as woodland, but also restore a natural mossland landscape. New woodlands, located adjacent to existing woods or hedgerows, could be created in areas that are wet or areas that drain management could re-wet.

**Habitat management priorities:**

- **Lowland bog:** Existing lowland bogs exist at Highfield Moss SSSI, Acornfield Plantation LNR, Reeds Moss and Moss Plantation, Kings Moss and Kings Moss Plantation, and Colliers Moss LNR. Acornfield Plantation, owned by Knowsley Council, is an actively growing lowland bog. Water level management and rhododendron control is vital to allow the bog to continue to thrive. Kings Moss is currently dry but the Lancashire Wildlife Trust as landowner is actively rewetting the site. Further wetting and management would be beneficial. Opportunities exist to enhance the small area of bog at Colliers Moss LNR which would complement the rest of the bog in Warrington (Burtonwood Moss).

- **Woodland:** Many of the existing woodlands are plantations, mainly pine trees of similar age, and are an important resource for red squirrels. Management that encourages pine regeneration could benefit red squirrels in the long term and would also open the canopy and allow ground flora to establish. The woodlands are dominated by the invasive plant, rhododendron, and its eradication is vital to ensuring the woodlands contribute a greater ecological diversity. The removal of the rhododendron would then allow native shrub species to establish. Management is a priority in Brown Birches. Mossborough Moss is more open and may provide the best opportunity to enhance management for biodiversity in the short term.

- **Heathland:** Has been recorded at Colliers Moss LNR. The habitat is threatened by shrub and tree encroachment. Management of the trees, shrub and dense vegetation would encourage heathland to regenerate.

- **Ditches:** The ditch and drain network supports the farming practices in the Focus Area. Ditches could be enhanced for species such as water vole, breeding birds and invertebrates by appropriately timed management such as vegetation cutting or dredging. In some ditches restoration cutting could be used to remove thick vegetation growth and dead plant matter to allow more species to establish.

- **Grassland:** Extensive areas of grassland exist at Holiday Moss and Colliers Moss north and south. The management of the grassland extent at Holiday Moss is vital to maintain the biodiversity interest. Grasslands at Colliers Moss are some of the most diverse in St. Helens. They suffer from lack of management and areas are being lost to woodland regeneration. Grassland maintenance and restoration work could be undertaken.

- **Ponds:** Colliers Moss LNR contains many ponds that are important for dragonflies. The site suffers from a lack of management and some ponds are being lost to woodland regeneration. Management could remove the shading of some ponds and manage emergent vegetation to provide open water. Protection of ponds from pollution inputs, such as nutrient enrichment, is important to ensure the habitat can support important species.

**Ecosystem Services Benefits**

The sites within the Focus Area are at the headwaters of the River Alt and Sankey Brook. By re-wetting the peat the sites could act as a store for water again. This would help to alleviate existing and future flooding downstream within the urban areas of Liverpool, Kirkby and St. Helens. Many of the brooks that flow out of the focus area are in poor condition as identified by the Water Framework Directive. Re-wetting the peat would also help to improve the quality of the water. Peat provides a significant contribution to carbon storage.

Delivery of the ecological opportunities could mean changes in the management of the arable and grazing land. With this change comes a range of economic and rural economy benefits, for example the storage of water protects other areas from flooding. This helps to make properties and land more secure outside the Focus Area and is linked to property values.

Management of the woodlands, in particular, could provide economic opportunities in relation to renewable fuels such as biomass. Many of the woodlands are currently used for game rearing. The potential ecological opportunities would allow this practice to continue but would provide additional resources to manage the woodlands.

There are opportunities for land management schemes to deliver habitat creation and ongoing management. For example, funding through the Water Framework Directive initiative could deliver re-wetting projects. Re-wetting projects could then be supported in the future by schemes such as the government's environmental management schemes, which could also be used to support landowners to change management of fields and introduce ecologically beneficial woodland management.

There is a mixture of arable and grazing land in the agricultural fields around the focus area. The potential ecological opportunities would result in changes from arable to grazing land. This would provide opportunities for expanded grazing which could support expansion of local dairy and meat production.

**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 help store flood waters and release them slowly, particularly as they are in the headwaters of the main brooks. This is in line with the approach the Environment Agency is taking to deal with flooding along the Sankey Valley and would support measures to protect areas along Simonswood Brook and the River Alt.

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

**Mersey Forest Plan** – The Focus Area covers a number of Policy Units with varying approaches. The ecological opportunities are in line with policies to maintain and manage existing hedgerows and woodlands where present. The protection, expansion and management of other habitats are a Plan wide policy which the ecological opportunities would help deliver.

**National Character Areas** –the ecological opportunities are in line with the four 'Statements of

Environmental Opportunity' identified in the Lancashire Coal Measures NCA 56 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** – 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.

**LCR LEP** – the identified ecological opportunities could help to support the LEP's Priority for Low Carbon Economy through the mosslands storing carbon. The Focus Area could also support the LEP'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.