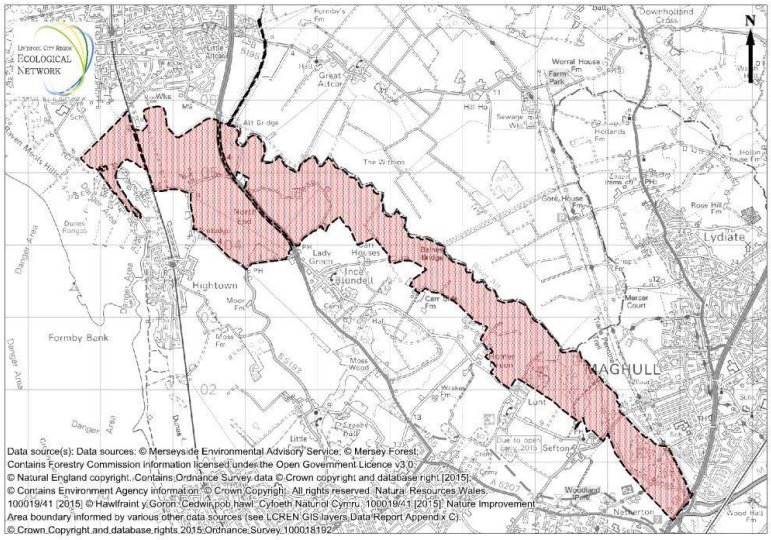
Liverpool City Region Ecological Network
Nature Improvement Area focus area

NIA Focus Area 03: River Alt Corridor

District(s): Sefton Area: 751 hectares

Ecological priorities are:



Habitat creation

- Reedbed, swamp and fen, which could be small scale in existing ditches or large scale by managing surface water;
- Grassland, mainly wet grasslands;
- Wet woodland, only around the existing woodlands or hedgerows; and
- Hedgerows, only adjacent to existing hedgerows around Hightown.

Habitat management

- Enhancing the agricultural land for breeding birds, passage and overwintering birds;
- Maintaining and enhancing the reedbeds and swamps;
- Enhancing the watercourses; and
- Managing and enhancing the existing grasslands, woodlands and hedgerows.

Existing ecological features:

1. There are 174ha of existing habitat.
2. Core Biodiversity Area: 4 Local Sites; together with grassland, woodland and wetland Priority Habitats.
3. Linear features: Rivers; brooks; ditches; hedgerows; roads; and a dismantled railway.
4. Species: Red squirrel; brown hare; water vole; otter; passage and wintering birds (e.g. pink footed goose, golden plover);

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farmland birds (e.g. grey partridge, corn bunting).

Focus Area description:

The area is predominantly productive farmland within the River Alt flood plain. The Focus Area retains pockets of important habitats that support important and significant populations of Priority Species, such as water vole and dragonflies. However, these habitats are highly fragmented and isolated from each other. The fragmentation and isolation limits the quality and quantity of biodiversity.

Current land use is maintained by a pumped system which requires financial capital and revenue investment that will need to be maintained to a degree in the future. The Focus Area is drawn around the River Alt, its tributaries, the extensive ditch/drain network and those areas around existing habitats and / or within Flood Zones 3 and 2 which are currently protected by earth embankments.

The north of the Focus Area is distinctive by being open and flat, which is important for landscape distinctiveness. The agricultural land is also important for feeding over-wintering birds, breeding farmland birds and farmland mammals such as brown hare. The agricultural land is key area of functionally-linked habitat for feeding bird species of the designated coastal sites; cropping patterns influence bird use.

The southern section of the Focus Area contains areas of historic landfill (Sefton Meadows) which have been restored as extensive areas of grassland and woodland. The Environment Agency and Lancashire Wildlife Trust have created 70 hectares of wetland habitat at Lunt Meadows.

Ecological opportunities

Habitat creation:

- **Reedbeds and Swamp:** The Focus Area provides a significant opportunity within the City Region to recreate reedbed and swamp. This would complement work at Lunt Meadows. Large scale habitat creation is key to providing sufficient habitat for rare species, such as marsh harrier, that breed at Altcar Withins, one of only two areas in Lancashire and immediately adjacent to the Focus Area. Small areas could be created within ditches as part of maintaining a pumped catchment. Larger areas could be created in the farmland north of Ince Blundell where an extensive ditch network drains the land.

- **Fen:** The Focus Area contain small pockets of degraded peat. There is some opportunity to create fen habitats where the peat is present. Areas are likely to be small and form as part of a habitat mosaic with other wetland habitats.

- **Ponds:** A small number of ponds exist in the Focus Area. Further ponds would support the populations of insects, amphibians and breeding birds. They would also provide important habitat for water vole and otter. Ponds could be created at the edges of fields to support the agricultural use.

- **Grassland:** a key habitat is ‘wet grassland’ where the ground is naturally wet. Fields prone to flooding or close to ditches that would enable flooding could be converted to wet grassland. Alternatively small habitat areas could be created adjacent to ditches/ponds or where water pooling already occurs. ‘Dry’ grasslands in other areas will complement the wetland habitats and could be created at field edges.

- **Wet woodland:** This habitat would only be appropriate for small scale creation adjacent to existing woodlands or hedgerows. Small areas around field edges would continue to support the agricultural use.

- **Hedgerows:** This habitat is present in small amounts near Hightown. The wider landscape is characterised by open views with little tall structures or vegetation. It would be inappropriate to plant extensive hedgerows as this would create enclosed fields not in keeping with the landscape. Some small infilling could be conducted between Orrell Hill Wood and Hightown to allow red squirrels to migrate and provide breeding habitat for farmland birds such as corn buntings and grey partridge, provided sufficient open views for passage and overwintering birds are retained.

Habitat management priorities:

- **Agricultural land:** The current use of agricultural land is mainly arable. Changes in management to spring sown crops, leaving stubble overwinter and/or rotating cropping cycles to include root vegetables would improve the potential for farmland species, passage and overwintering birds to use the area. The alteration of arable practices could act as a mechanism to ensure feeding areas are maintained for birds that are qualifying species of the coastal protected sites, such as the Ribble and Alt Estuaries.

- **Reedbed and Swamp:** The largest extent of reedbed is at Lunt Meadows. This is recently planted and currently developing. Management would be needed in future to ensure the reedbed does not dry out or become overgrown. Small pockets of reedbed exist along ditches and drains and appropriate management can maintain and extend the area. Management could also be used to increase species diversity of plants and animals.

- **Rivers, brooks and ditches:** The river corridors are narrow in places due to flood protection. The channels and banks are maintained to ensure the flow of water is not impeded. This results in linear swamp and tall grassland habitats, which are important for water vole, otter, fish, breeding birds, including owls, and insects. Management should aim to maintain the habitats and allow them to expand where possible. A maintenance programme that is sensitive to ecology, such as rotational bankside cutting, is important to deliver flood defence and ecology benefits. Where possible, i.e. near woodlands or hedgerows, allowing trees to grow alongside the banks would introduce more habitats to the watercourses that would benefit the species using the watercourses.

- **Grassland:** Large areas of grasslands are present at, and south of, Sefton Meadows. Management needs include maintaining the extent of grasslands and preventing them from developing into scrub/woodland. This could include annual cutting for hay and conservation grazing. Projects could be taken forward quickly with the Public Body owner.

- **Woodland:** Plantations around Sefton Meadows require management to thin trees; introduce shrubs and ground plants to allow the woodlands to develop into natural habitats. This is the next stage in woodland establishment in these plantation woodlands.

A number of these sites are within Public Ownership (Forestry Commission) and projects could be taken forward quickly. Mature woodlands in the north of the area would benefit from traditional management, such as coppicing, to maintain or increase species diversity. Woods, such as Orrell Hill, are important for red squirrels and maintaining a feeding resource and control of grey squirrels is vital to maintain the red populations.

- **Hedgerows:** The small sections of hedgerow contain gaps and are overgrown. 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. Maintaining tall trees along the route would maintain the existing character.

Ecosystem Services Benefits

The Focus Area is an important area for feeding passage and overwintering birds that are qualifying species for the designated coastal sites. The identified ecological opportunities present options for habitat improvements to ensure that impacts from land use change or development, just outside of the Focus Area are mitigated or could be compensated.

The River Alt is a pumped catchment with a complex network of ditches and artificial structures maintaining water levels. This may be financially unsustainable in the future and discussions are taking place at present (2015). The ecological opportunities provide for a long term financially and ecologically sustainable method to manage flooding. Small scale intervention such as swamp, pond and wet woodland habitat creation can store water which would protect adjacent fields. This is set out in the *Alt Crossens Catchment Flood Management Plan, Environment Agency, 2009* "opportunities for habitat enhancement through 'wetting up' of land and promotion of ecological networks".

The watercourses are also in poor condition under the Water Framework Directive. The River Alt is an Environment Agency priority for action. Improvements and expansion to habitats such as swamps would help to filter water and improve the quality. Initiatives such as the Water Framework Directive could help support landowners to deliver wetland habitat creation and management.

The grasslands, reedbeds and woodlands all store carbon and contribute to a low carbon economy. Habitat creation could act to improve air quality through filtering. The management of these habitats could then provide economic opportunities in relation to renewable energy such as biomass. This could recoup resources and introduce and strengthen management of the sites and provide additional resilience to the landscape for local communities.

The Focus Area is predominantly agricultural land. The ecological opportunities maintain this land use, with some limited alteration in management to benefit ecology. Some of the ecological opportunities could result in changes from arable to more grazing land and meadows, providing opportunities for expanded grazing which could support expansion of local dairy and meat production. It could also provide hay resources to be sold to farmers in the wider area. Grassland creation or management could be supported financially by schemes such as the Countryside Stewardship schemes.

The ecological opportunities could provide facilities for recreation, leisure, tourism and education including angling facilities. All of which are in line with the LEP's Priorities for the 'Visitor Economy' and 'Knowledge Economy'. This would build upon Lunt Meadows where one of the objectives is for a recreation and education facility.

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 help deal with surface water management within the Alt and Crossens catchment.

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

Mersey Forest Plan – The Plan considers the existing landscape and the identified ecological opportunities are in line with the policy. The protection, expansion and management of other habitat is a Plan wide policy which the ecological opportunities could deliver.

National Character Areas –the ecological opportunities are in line with the four 'Statements of Environmental Opportunity' identified in the Sefton Coast NCA 57 profile and the Lancashire and Amounderness Plain NCA 32 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 ecological opportunities could help to support the LEP's Priorities for Low Carbon Economy and Visitor Economy such as at Lunt Meadows. 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.