



Sankey Valley Corridor Enhancement Project

Green Infrastructure data

Biodiversity and ground nesting bird habitat



Introduction

Sankey Valley is a key environmental and economic corridor; it runs through 3 local authority areas and consists of 20% urban, 80% green infrastructure.

This study funded by Natural England sets out the key biodiversity opportunities, building on the work in the Liverpool and Warrington Green Infrastructure Framework.

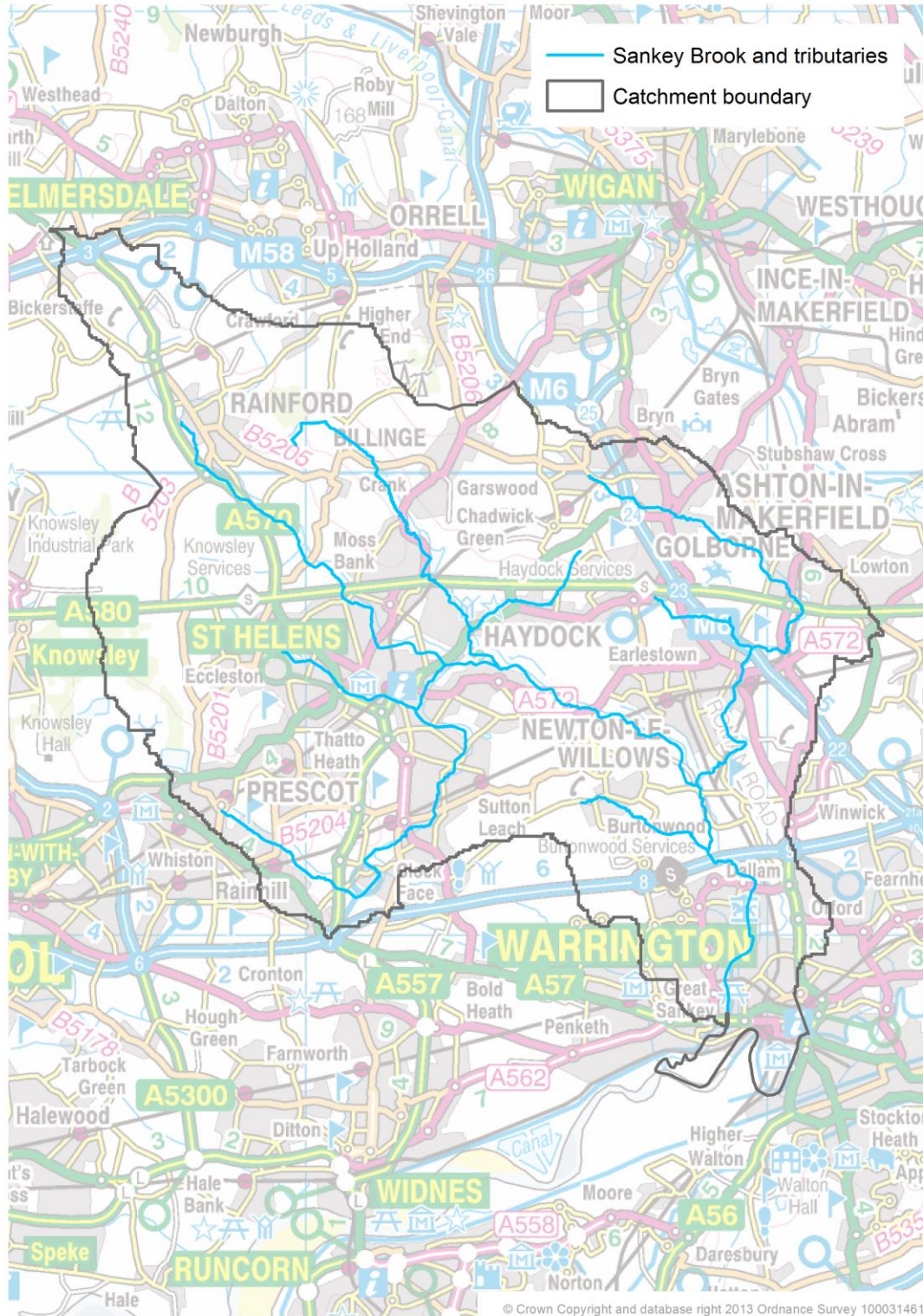
It provides a basis for future targeting of resources, has catalysed a new partnership approach to the valley and may be used in the future in S106 discussions, particularly for the Omega site in Warrington.

For this last reason, the study has gone beyond the original brief to assess the opportunities for habitat improvement for ground nesting birds.

The work will now be taken forward through the new partnership group that is evolving.

Map 1 shows the boundary of the study area. It consists of the combined catchments of the Sankey Brook and its tributaries, as provided by the Environment Agency.

Map 1



Map 2 shows the distribution of different types of green infrastructure within the study area. This mapping is taken from the Liverpool City Region Green Infrastructure Framework¹. The method used to generate the mapping is described in Appendix 1 of the Framework technical document. The typology classification is estimated to be around 80% accurate.

Table 1 gives the percentages of the study area covered by each of the types of green infrastructure.

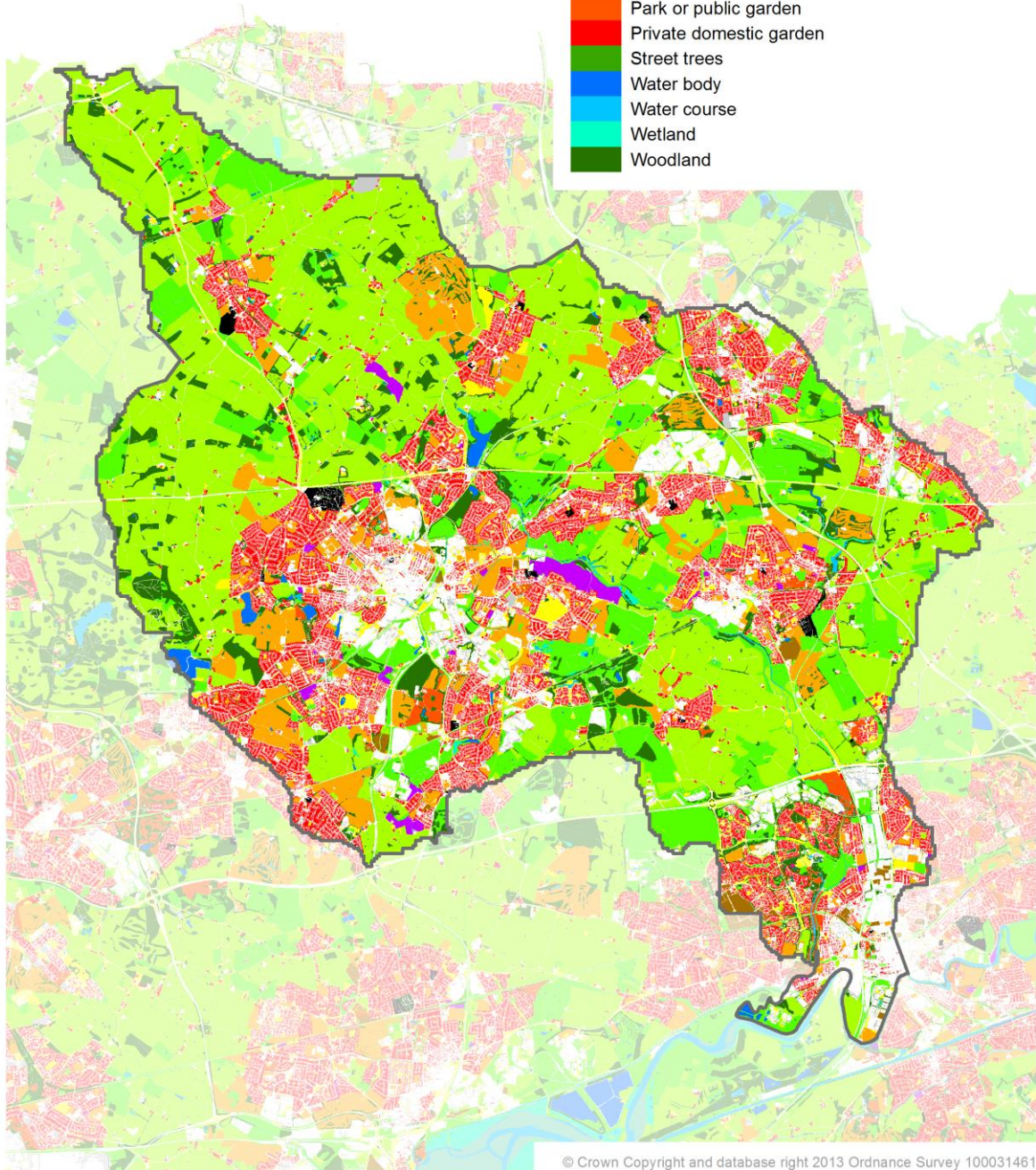
Table 1

Type	Area (ha)	Percentage
Agricultural land	6104	35.3%
Allotment, community garden or urban farm	122	0.7%
Cemetery, churchyard or burial ground	65	0.4%
Coastal habitat	1	0.0%
Derelict land	81	0.5%
General amenity space	570	3.3%
Grassland, heathland, moorland or scrubland	2223	12.9%
Institutional grounds	221	1.3%
Not GI	3334	19.3%
Orchard	3	0.0%
Outdoor sports facility	1257	7.3%
Park or public garden	142	0.8%
Private domestic garden	1918	11.1%
Street trees	38	0.2%
Water body	121	0.7%
Water course	75	0.4%
Wetland	24	0.1%
Woodland	1125	6.5%

¹ <http://www.merseyforest.org.uk/our-work/green-infrastructure/liverpool-city-region-green-infrastructure-framework/>

Green infrastructure typology

- Agricultural land
- Allotment, community garden or urban farm
- Cemetery, churchyard or burial ground
- Coastal habitat
- Derelict land
- General amenity space
- Grassland, heathland, moorland or scrubland
- Green roof
- Institutional grounds
- Orchard
- Outdoor sports facility
- Park or public garden
- Private domestic garden
- Street trees
- Water body
- Water course
- Wetland
- Woodland



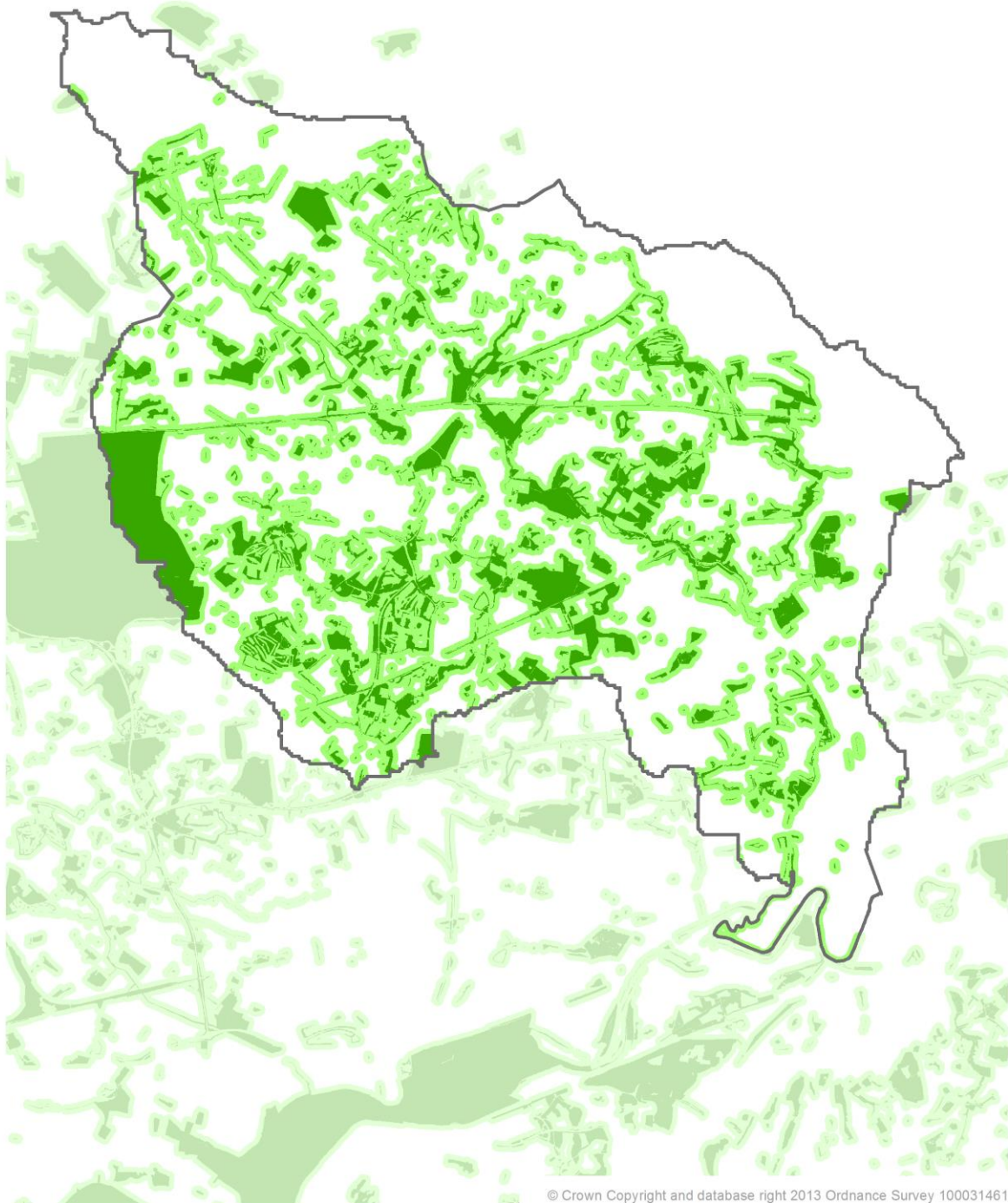
Map 3 shows the Core Biodiversity Areas and Connectivity Zone within the study area as per the Liverpool City Region Ecological Framework². The Core Biodiversity Areas “represent the highest biodiversity resources in the Liverpool City Region. These are seen as the starting point for the development of the LCR Ecological Framework.” The Connectivity Zone is “a guide to protecting and increasing the linkages between the Core Biodiversity Areas, helping to make [them] more robust and resilient when it comes to adaptation to climate change.”

The Merseyside Environmental Advisory Service generated the Core Biodiversity Areas and Connectivity Zone for Liverpool City Region, which under this definition includes St Helens but not Warrington. Both of these authorities cover large parts of the study area. The Core Biodiversity Areas and Connectivity Zone were extended to cover Warrington as part of the Liverpool City Region Green Infrastructure Framework. The authorities outside of Liverpool City Region that cover relatively small parts of the study area, Wigan and West Lancashire, are not covered.

² <http://www.sefton.gov.uk/default.aspx?page=11542>

Ecological Framework

- Core Biodiversity Areas
- Connectivity Zone





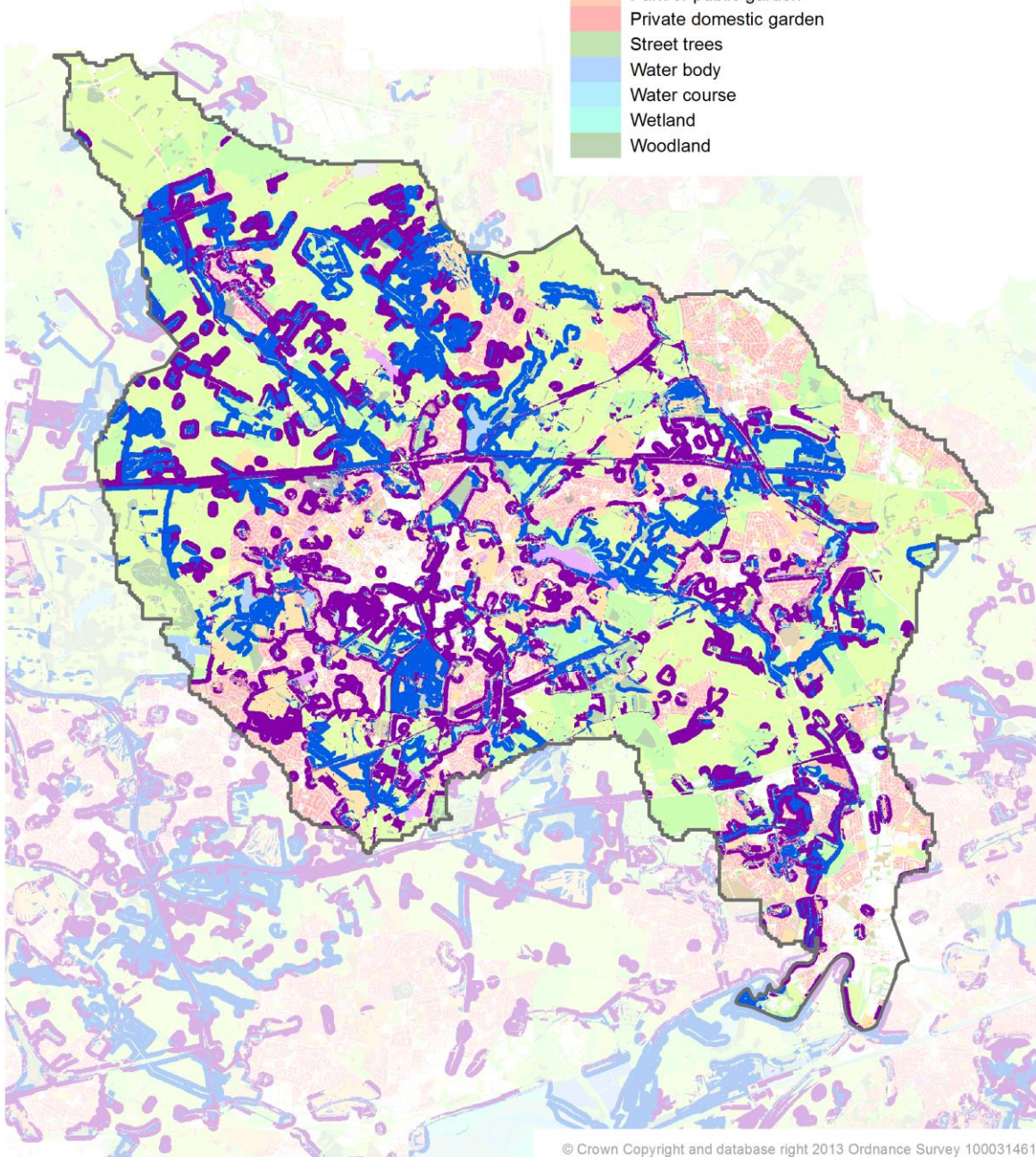
Map 4 shows the key green infrastructure assets and pinch points within the study area relating to the 'Enhancing the Ecological Framework' priority from the Liverpool City Region Green Infrastructure Framework. The full method for generating these is described in Appendix 1 of the Framework technical document. Essentially, the key assets are where a relatively large number of green infrastructure needs relating to 'Enhancing the Ecological Framework' are met, and the key pinch points are where there are a relatively large number of needs that are not met.

If possible, the former should be protected and managed so that they continue to meet the needs. At the latter locations, green infrastructure should be created or enhanced, if possible, in order to start meeting the need.

Key assets and pinch points Ecological Framework

- Key assets
- Key pinch points

- Agricultural land
- Allotment, community garden or urban farm
- Cemetery, churchyard or burial ground
- Coastal habitat
- Derelict land
- General amenity space
- Grassland, heathland, moorland or scrubland
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Map 5 shows opportunities for the most straightforward conversion of land to habitat for ground-nesting birds. This is based upon the green infrastructure typology mapping from the Liverpool City Region Green Infrastructure Framework and suggestions from Rick Rogers of St Helens Council. Rick said the following.

“In creating habitat we should not be displacing existing habitat(s). Therefore, we should be looking at agricultural land to provide the blank canvas.

“We need to consider the capital works and the revenue side i.e. management/sustainability of the habitat; relatively large areas will be needed to create significant breeding habitat (i.e. space for more than one or two breeding pairs).

“Options could be to:

- i. Create hay meadow grassland
- ii. Change an area of farmland from winter cereals to spring sown with permanent grass margins
- iii. Create an idealised farmland area to replicate mixed farming to cater for species such as Skylarks and Lapwings
- iv. Pay farmers to manage ‘skylark plots’ in the winter cereal crops

“Issues of nutrient levels may be a factor. Soil inversion could be needed to create meadow habitat.

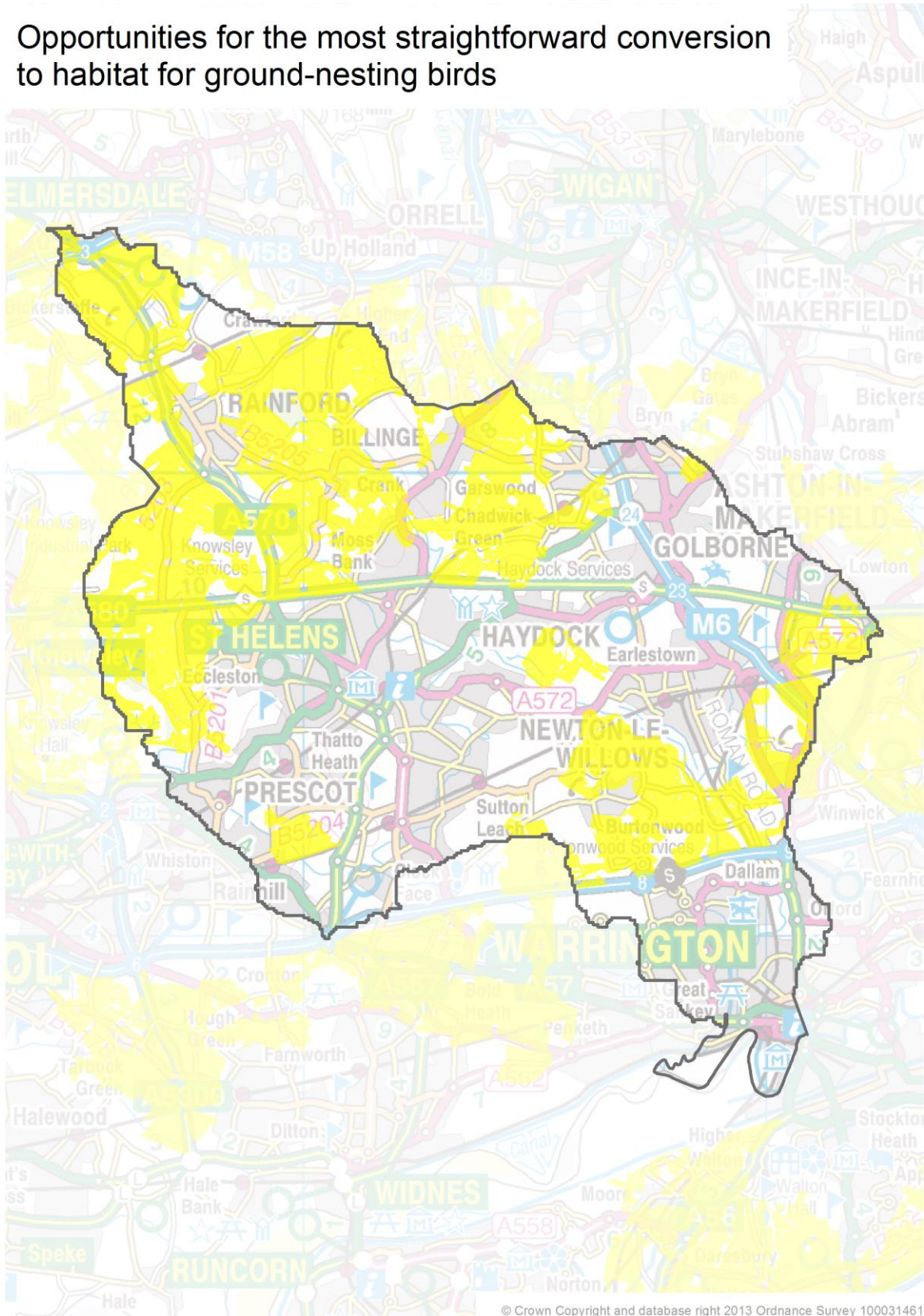
“Focusing on Skylarks to give you an idea, the highest breeding densities of Skylark are in arable areas and are around 4.6 - 6.0 pairs per km².

“A lot will be to do with disturbance and potential for predation and the larger the site the reduced ‘biological edge’ effects.

“It will depend on whether the habitat will be solely grassland or will it have features such as trees and hedges? Skylarks are reluctant to breed in tall dense grass (i.e. over 12" in height) and stay about 25m away from trees to nest.”

Contiguous areas of agricultural land larger than 1km² are therefore presented.

Opportunities for the most straightforward conversion to habitat for ground-nesting birds



Ground Nesting Birds

One key issue for the Sankey Valley is the impact of the major development at Omega on ground nesting bird populations.

The opportunity to look wider, beyond the immediate vicinity of the development either side of the M62 in Warrington is being discussed. This would enable a landscape scale approach across the valley providing compensatory and enhanced ground nesting bird habitat.

The work developed as part of this plan will form the basis for these discussions.

Next Steps

A new group focussed on delivery of socio-economic benefits through environment based interventions is developing and will use this work to help shape future activity and delivery of projects and programmes in the area.

We are developing a 15 mile long “**Enviro-economic**” corridor between Carr Mill, St Helens and Spike Island, Widnes, providing

- A focus for employment training
- A sustainable employment access route way
- A visitor destination with three visitor hubs at Stanley Bank, Bewsey Old Hall area of Warrington and Spike Island
- A coherent flood management programme
- A focus for health activities linked to coordinated “Natural Health Service” provision
- A functioning, major wildlife corridor

Why the Sankey Valley?

The scale of the landscape unit, coupled with the breadth of issues influencing it creates a unique opportunity to address a range of problems and issues within a coherent project framework and a broad cross-boundary project partnership.

Employment training

The Valley offers a wide range of opportunities to establish a programme of employment training initiatives, which can help to increase the work- readiness of key target groups such as NEETS whilst providing a site maintenance resource.

By developing a land-management team through an accredited training provider, to undertake a range of tasks such as path maintenance, removal of obstacles from river channels routine, basic transferable skills can be instilled whilst supplementing and complimenting current site management.

A potential delivery mechanism for this is Groundwork West Lancashire and Wigan. Groundwork has been a principal partner in the development of Stanley Bank, both



investing significant cash funding, officer time and providing a range of expertise from landscape design to contract management and strategic project planning.

Groundwork is a registered provider of jobs training and run the following options:

- Ex-offender focussed “Rebuilding lives” programme
- Apprenticeships and training offer
- Progression path to employment

Sustainable transport /LSTF

Sankey Valley is identified as strategic spine for a sustainable transport network, providing a continuous route to employment sites between St Helens, Warrington and Halton. Successful Local Sustainable Transport Fund bids in St Helens and Warrington will see around £500,000 to be invested in the Sankey Valley in the next 3 years.

Visitor Destination

Development of three visitor hubs at Stanley Bank, Bewsey and Spike Island linked by the Sankey Canal Trail will provide a sub-regional visitor destination, which, along with Bold Forest Park, will provide key recreational green space for existing and future residential development. The valley holds an important place in national economic history and offers a significant opportunity to market its industrial heritage.

Flood Management

Significant flooding problems have persisted along the valley, particularly at Black Brook (St Helens), Dallam and Sankey Bridges (Warrington) . An approved partnership with the Liverpool University / Waterco Knowledge Transfer Partnership (Admin Decision EPRO 001394) coupled with Environment Agency funding will allow cost effective and sustainable solutions to be developed.

Health

The Sankey Valley is a major recreational resource for the three Boroughs, which can play a targeted role in addressing problems such as high levels of cardio-vascular disease and childhood obesity. A “natural health service” approach linking exercise to health provision using walking, cycling, jogging programmes via a partnership approach with care providers can help to increase participation in exercise as a preventative measure and as a “prescribed” treatment.

A functioning, major wildlife corridor

The Government’s White Paper on the Natural Environment, The Natural Choice-Securing the Value of Nature, promotes the need for coherent ecological networks and functioning ecosystems as part of ecological sustainability and adaptation to climate change. Liverpool City Region Ecological Framework identifies SVP as a strategically important

wildlife corridor, with particular importance, identified for Water Voles (*Arvicola aquaticus*) via the Wildlife Trust's NW Water Vole Project.

Existing data

Sankey Valley has been identified in the Liverpool City Region and Warrington Green Infrastructure Framework as a key project. There is a wealth of evidence to underpin the work to develop a cross boundary strategic approach to the Sankey Valley. Appendix 1 sets out some of the green infrastructure data.

Opportunities

The focus on the Sankey valley is in the context of a number of emerging potential opportunities;

1. EU Structural and rural funds
2. Agri- environment schemes
3. Atlantic Gateway

Who are the proposed project partners?

- St Helens Council
- The Mersey Forest (Key lead partner)
- Groundwork (Key Lead Partner)
- Liverpool University /Waterco Knowledge Transfer Partnership
- Warrington Borough Council (expressed support and synergy to proposed project)
- Halton Council (expressed support and synergy to HBC project)
- Sankey Canal Restoration Society (expressed strong support)
- Environment Agency (expressed outline interest)
- Wildlife Trusts for Lancashire and Cheshire
- Liverpool Museum Field Archaeology Unit (expressed support)
- Canal and Rivers Trust

Whilst subject to discussion, it is envisaged that a strategy is developed for the whole valley and that each authority leads on implementation within its area through a local partnership. This will be complimented an overarching sub-regional development level, which is led by The Mersey Forest and supported by Groundwork.

How will it be funded?

The project will be funded by matching grant bids across a range of sectors including transport (LSTF), Health, E.A. Catchment Improvement Fund, and Heritage Lottery.

Current projected investment is:

LSFT - £500, 000 (£420,000 in St Helens)
Environment Agency £30,000
Liverpool University KTP £35,000

This will provide a platform for grant funding applications



Current Local Authority revenue expenditure can be quantified and where appropriate, elements re-packaged as capital expenditure to provide a degree of match funding along with Officer Staff Time.