

GREEN INFRASTRUCTURE FRAMEWORK FOR NORTH EAST WALES, CHESHIRE AND WIRRAL

# Executive Summary





Liverpool Bay

Liverpool

Greater Manchester

Prestatyn

Birkenhead

River Dee

Heswall

River Mersey

Frodsham

Knutsford

Wimslow

Macclesfield

Holywell

Ellesmere Port

Flint

Queensferry

Chester

Northwich

Winsford

Middlewich

Denbigh

Clwydian Range

Mold

Sandbach

Congleton

Ruthin

Crewe

Wrexham

Nantwich

Stoke-on-Trent

Llangollen

**KEY**

-  Framework boundary
-  Main settlements

# Background

The Framework considers the natural environments of Denbighshire, Flintshire, Wrexham, Cheshire West and Chester, Cheshire East and the Wirral. It sets out a vision of how a healthy natural environment can help sustain economic growth and thriving communities.

These areas of North East Wales and North West England have distinctive character, based on the high quality of the natural environment, which attracts people to live, study, visit and invest. People value the area for its amenity, historic, cultural and wildlife interest. Its prosperity depends on the health of the natural environment, which is often referred to as “green infrastructure”.

## **Definition of Green Infrastructure (GI):**

*“a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities” (Planning Policy Statement 12: Local Spatial Planning)*

**The Green Infrastructure Framework for North East Wales, Cheshire and Wirral provides a guide for the next 10-15 years and beyond for GI planning, investment and delivery. It highlights where the existing GI assets are, locates the weaker areas and guides priorities for future investment. It has been produced to assist with, and guide actions for, the delivery of GI across**

## **North East Wales, Cheshire and Wirral as part of its long term sustainable development.**

*GI can help realise significant wide reaching opportunities, including:*

- *unlocking economic development potential;*
- *addressing health inequalities and creating a high quality of life;*
- *underpinning the economy with a healthy and biodiverse landscape fabric;*
- *helping climate proof our settlements and rural economy.*

The six local authorities have economies that benefit each other, a connective transport infrastructure and linked natural environment networks. Sustainable economic growth is a shared priority, and GI planning is a vital element in catalysing growth while minimising its environmental impact.

## **Commissioned by:**

*The Framework was commissioned in 2010 by a partnership of local authorities and environmental agencies with responsibility for overseeing the planning and delivery of GI across North East Wales, Cheshire and Wirral. The work has been facilitated by the Mersey Dee Alliance (MDA).*

**A weblink to the main Framework report is located on the rear cover.**

# Spatial Portrait

The North East Wales, Cheshire and Wirral Framework area covers 2,100km<sup>2</sup> and is home for over 1.3 million people. It contains a diverse range of landscapes, both cultural and physical, and a number of different economies.

Its green infrastructure resource is equally as varied, including the highly valued landscapes of the Clwydian Range Area of Outstanding Natural Beauty, fringes of the Peak National Park and the Dee coast. Smaller but no less valued environments can be found within and around settlements in the lowland areas.

The Welsh and Wirral coastlines are a dominant landscape element in the area and provide both biodiversity and economic benefits. The coastal settlements of Rhyl and Prestatyn have relied on this resource as a major income generator and will continue to do so. The coast of



Wirral is equally as important to its communities providing open and recreational space.

Inland, part of the Clwydian Range is designated as a SPA and the River Dee is a Special Area of Conservation (SAC). The rivers, canals and other watercourses act as corridors for wildlife, providing links between the uplands, lowlands and the coast.

The area also boasts rich and diverse settlements with a range of urban areas, towns and villages. These settlements are enhanced by historic buildings and structures and green spaces that combine to create distinctiveness and uniqueness of place.

# Policy

In England, GI has risen up the political agenda and is recognised as an essential part of sustainable development. Planning Policy Wales (Edition 2 – 2010) states the importance of planning for sustainability, the multi functionality of open green space and the emphasis on a sustainable approach to flood management. Most recently Welsh Assembly Government has consulted on 'A Living Wales - A New Framework for Our Environment, Our Countryside and Our Seas' and will be finalised during 2011. Their framework has very similar aims, objectives and potential outcomes as GI planning.

The UK coalition government is committed to two key concepts which are fundamental to green infrastructure:

- 1 actively planning for a healthy natural environment at local and strategic scales
- 2 enabling communities and local businesses (civil society) to have a majority stake in the management and planning of land-uses and green spaces



# GI for Public Benefit

One of the purposes of the Framework is to inform priorities for GI investment through an approach called the Public Benefit Recording System (PBRS). It illustrates where there are particular needs for, or opportunities to deliver GI benefits. Using the PBRS tool, we identified:

- location and functions of existing GI assets
- gaps in provision or functioning of GI assets
- areas of strong community wellbeing and business enterprise
- areas where specific issues (such as poor health) constrain community wellbeing and business enterprise



## Need

PBRS identifies areas with social, economic or environmental needs and where green infrastructure interventions can help address those needs. For instance well managed green spaces can contribute towards increasing levels of exercise to improve health and wellbeing within areas of health deprivation.

## Opportunity

PBRS identifies areas where there is a higher concentration of existing GI assets. These offer an opportunity to create a wider green infrastructure network through improved access and management. These areas offer opportunities for businesses and social enterprises operating in the “green” economy to grow and create jobs.

Where major new housing or employment is proposed, development can offer opportunities to create a fully functioning green infrastructure and reverse past environmental degradation through environmental improvements associated with the new development.

The figure on Page 6 represents the combination of the need and opportunity maps. It shows where existing GI assets can be managed to broaden benefits for communities and the environment. It also shows areas likely to experience significant investment and transformation as a result of growth and regeneration.

## Case Study - Stamford Brook

**Stamford Brook is an urban extension located on the fringes of Altrincham in Greater Manchester. It will accommodate 700 homes. GI plays a major role in underpinning the development and this has been achieved through partnership working between the National Trust (former landowners), Trafford Council, the Environment Agency and the two housing developers. The development includes a number of GI assets including amenity greenspace, green corridors, swales, a restored waterway, natural and semi natural greenspace and community woodland.**



*Sinderland Brook water course restoration*



*Stamford Brook open space & SuDS system*

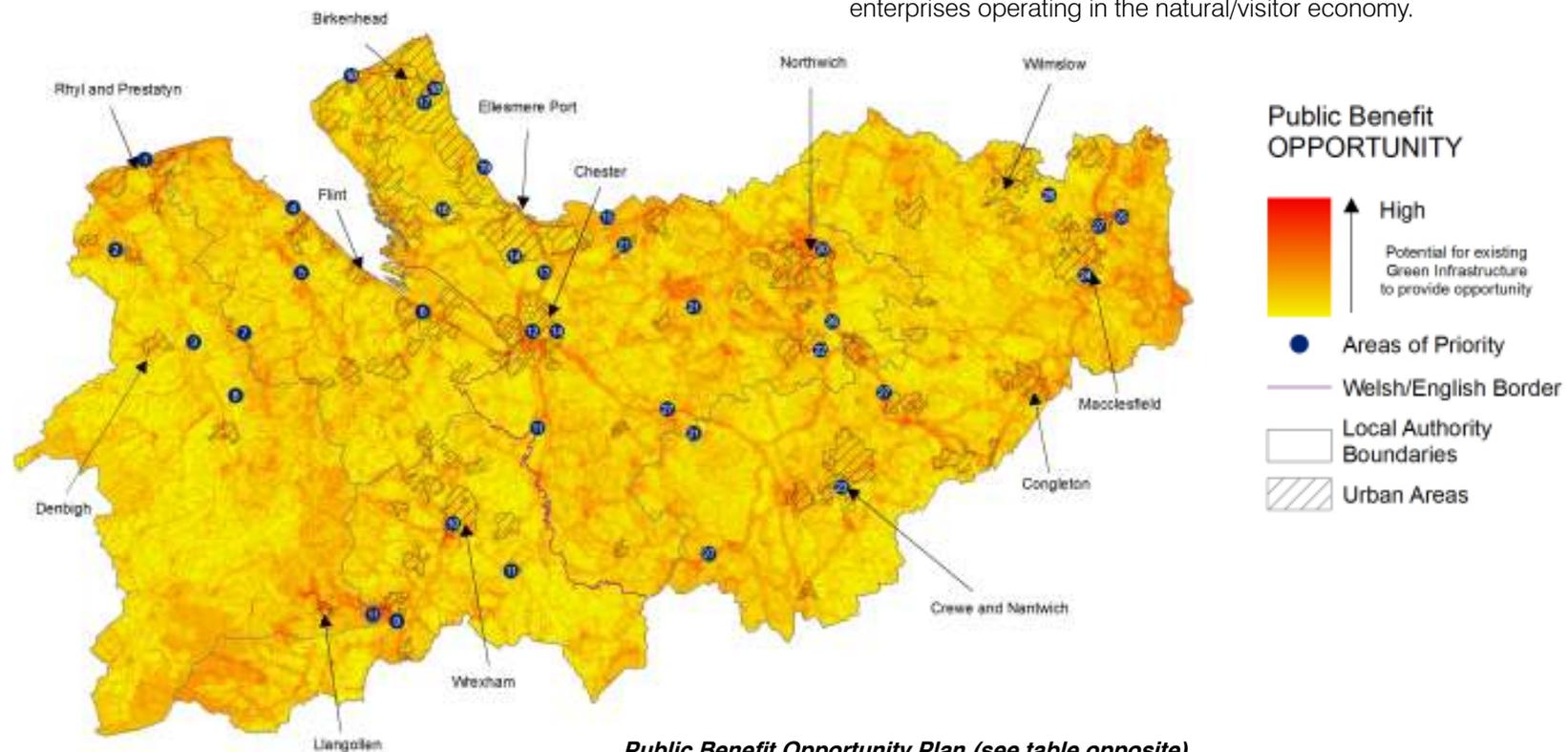
# Framework Response

The PBRs inform the framework, not only by identifying areas of priority, but also by hinting at actions appropriate to these areas.

In areas of environmental need, GI actions should focus on restoring the conditions necessary for a healthy natural environment. This may involve the creation or linking of assets, or may involve management of existing assets.

In areas of socio-economic need, GI actions should create or manage green space, and more crucially, should increase levels of community and business use of such green spaces.

In areas of opportunity, GI actions should build on the strengths of existing assets and prospering businesses through further environmental enhancement, filling gaps in GI provision and supporting enterprises operating in the natural/visitor economy.



Areas of priority for GI Investment; indicating opportunities arising from, green infrastructure.	OPPORTUNITIES √ Opportunity √√ Significant Opportunity		
	Coherent networks of existing GI assets contributing to local distinctiveness, community life and climatic resilience	Existing Natural / Visitor Economy	Area of probable transformation through housing and economic growth
AREA \ STRATEGY RESPONSE	Conserve & enhance assets, enabling community management	Support enterprise	Set standards for provision and management of GI assets
1.Denbighshire Coast	√	√ √	√
2.Bodelwyddan & St Asaph	√	√	√ √
3.Clwyd Valley	√ √	√ √	
4.Flintshire Dee Coast	√		√
5.Halkyn and river valleys	√	√	
6.Deeside employment areas and adjacent towns			√ √
7.Clwydian Range	√ √	√ √	
8.Mold, Ruthin, Denbigh	√ √	√ √	√
9.Llangollen & Pontcysyllte WHS	√ √	√	
10.Wrexham and surrounding settlements	√	√	√ √
11.Dee valley (Chester to Llangollen)	√	√	
12.Chester City Centre	√ √	√ √	√
13.Chester – Ellesmere Port M53/A41 corridor		√	√ √
14.Ellesmere Port & Chester housing renewal areas			√
15.Ellesmere Port to Mouth of the Weaver inc Gowy River	√	√	√
16.Wirral Coast & Wirral Way	√ √	√	
17.Birkenhead & Wallasey housing renewal areas			√ √
18.Wirral Waters development	√		√ √
19.Mersey Shore (Ellesmere Port to Seacombe)			√ √
20.Northwich and lower Weaver valley	√	√	√ √
21.Delamere, Helsby, Beeston and the Cheshire sandstone landscape	√	√ √	
22.Winsford & the mid-Weaver valley	√	√	√ √
23.Nantwich and Crewe – town regeneration and urban extensions	√		√ √
24.Macclesfield urban extension	√	√	√ √
25.Cheshire Peak and fringe farms and towns	√	√ √	
26.Rivers Bollin, Dane and valley farmland	√	√	
27.The canal network	√	√ √	√

# Stakeholder Consultation



*Consultation event in Ellesmere Port*

The Framework is based on work over a 9 month period in 2010, and has been informed by extensive consultations with over 100 local stakeholders involved in planning, managing and delivering GI and sustainable development across North East Wales, Cheshire and Wirral. Stakeholder views have been gathered in five ways:

- Regular steering group meetings
- Questionnaires circulated to local community and environmental groups within Cheshire East
- Interviews with stakeholders
- Focus groups
- Stakeholder workshop held in Chester, where over 60 representatives from environmental, community and local authorities provided comment on the interim findings of the Framework.

# Vision

The vision statement emphasises the importance of both the strategic and local approach and a practical plan of campaign for the next 10-15 years.

*'Our vision for green infrastructure in North-east Wales, Cheshire and Wirral is to enhance and connect the collective potential of our diverse natural, urban and cultural environments, threading them together to enhance and create many special places. Places that sustain and grow our economy and draw people in to visit, live, work and invest.*

*A basic principle is that green infrastructure activity consists of "a few major projects and a thousand smaller changes" which collectively achieve the vision. So we will enable communities and businesses which have positive aspirations for their local environment to fully participate in managing green infrastructure.'*



# Aims of the Framework

We have six long-term aims for green infrastructure:

- 1 Create a setting for urban and rural prosperity.
- 2 Support and enhance the visitor experience and economy.
- 3 Build healthier communities.
- 4 Maintain and enhance quality of place
- 5 Ensure urban and rural areas are resilient to effects of climate change.
- 6 Protect and enhance biodiversity and natural networks, providing opportunity for people to experience the natural environment.

For each aim, detailed objectives are listed and key diagrams illustrate the broad spatial priorities. As an example, Aim 1: Create a setting for urban & rural prosperity is illustrated below. It shows the priority areas for GI investment in that context.

For this aim, the focus is on improving the quality of place, the competitiveness of areas of economic activity and the resilience of areas of future housing development. GI investment will boost attractiveness for inward investment and will enhance environmental performance. This includes measures such as managing flood risk, surface water management, reducing run-off into sensitive watercourses, providing opportunities for wildlife and delivering high quality landscape settings. Rural landscapes also offer economic opportunities, particularly in

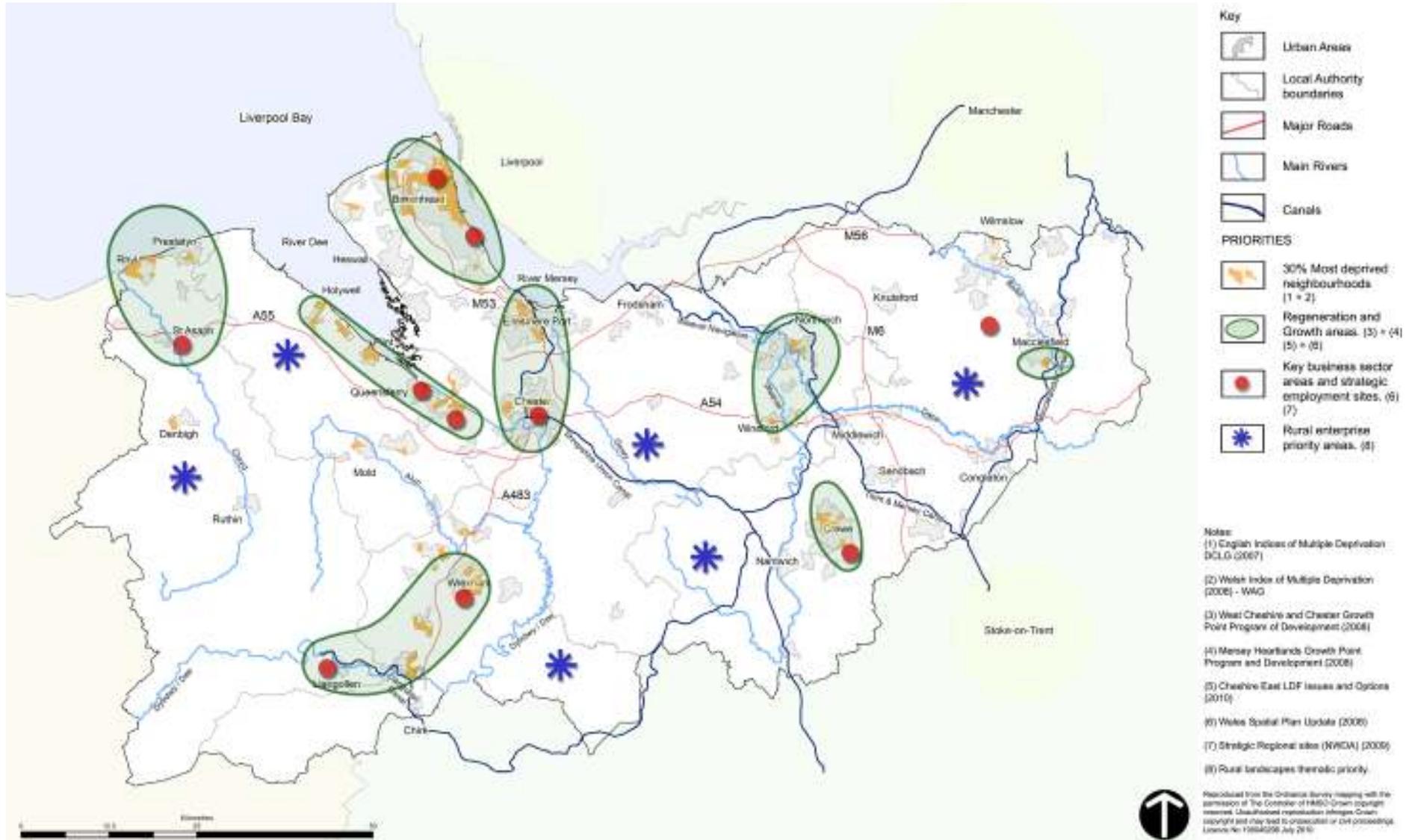
relation to farm diversification, woodland based recreation and tourism, energy generation and harvesting and processing of food and forest products.

The key diagram on page 11 illustrates some of the priority areas for GI investment for urban and rural prosperity:

- Key business-sector areas, strategic employment sites and major mixed-use regeneration areas
- Neighbourhoods experiencing high levels of worklessness and poor health
- Rural enterprise priority areas



*Egremont Promenade, Wirral*



**Aim 1: Create a setting for Urban and Rural Prosperity**

# Action Planning

Action planning sets out how GI can be put into practice on the ground. The natural environment is inherently complex, and its management is made even more challenging by the diversity of communities and businesses that depend on it and the changing patterns of land use. As the framework covers a diverse geographical area, action planning is organised under five headings:

- Settlements
- Land & water management
- Coast & estuary management
- Community and business participation
- The natural and visitor economy

## Settlements

Parts of the area will experience housing growth, most of which will be within or adjacent to existing settlements. The overall aspiration is for GI that contributes to sustained and enhanced quality of place, in growing and established towns and villages. Particularly important are GI initiatives that contribute to sustainability, health, well-being and economic competitiveness.

## Land and Water Management

GI Initiatives focussing on land and water management are concerned with securing and enhancing ecosystems, preserving and enhancing areas of landscape and cultural quality and adapting to and mitigating against climate change.

## Coast and Estuary Management Initiatives

The Mersey and Dee estuaries provide a significant recreational resource and sustain economically important ecosystems. However, there are still gaps in the coastal path network that need connecting to the existing network, together with opportunities for promoting heritage, interpretation and the natural economy of the coast.

## Community and Business Participation

Community and business participation with the natural environment is key to its future quality and its ability to deliver public benefit, and the only practical way to deliver the thousands of small projects necessary to create, manage and enhance local green infrastructure.

The coalition government wishes to open up public assets and services to communities and social enterprises. This gives an opportunity for communities to lead environmental activity including promotion of green apprenticeships and volunteering.



Limited public-sector funding for the natural environment also increases the need for community management of open spaces, which in turn stems from increased responsibility for neighbourhood environmental quality.

## Natural and Visitor Economy Initiatives

North East Wales, Cheshire and the Wirral have numerous tourism and visitor assets. These range from the landscape scale such as the canal network, the Peak Park, the Clwydian Range; to individual sites of interest such as the Anderton Boat Lift in Northwich and the wider canal and waterway network. These assets can be enhanced by raising awareness as to how the natural environment adds value to the local economy and by improving linkages to enable better access.



## Case study - Green Streets, Ellesmere Port

**Green Streets is a Mersey Forest project which uses greening projects to improve the quality of life for urban communities by planting trees within a variety of locations, including; residential streets, gateway sites and green space linkages.**

**Green Streets works with local residents, businesses and partner organisations to promote the value of green infrastructure as a means of tackling a range of social, economic and environmental issues.**

**<http://www.merseyforest.org.uk>**



## Case study - Greening the City/ Project Dirt

**Project Dirt Liverpool is a social networking site for Environmental projects and community groups across Liverpool and Merseyside to publish their projects, advertise events, provide support and keep in touch with other members. It enables collaboration and sharing of skills between these groups.**

**[www.projectdirt.com](http://www.projectdirt.com)**



## Case study - Pontcysyllte World Heritage Site (WHS)

**Pontcysyllte is the tallest navigable aqueduct in the world and transports the Llangollen Canal over the Dee Valley linking Llangollen with the Shropshire Union Canal. The aqueduct along with connecting canal infrastructure (extending approximately 10 miles west to Llangollen and south to Chirk) was inscribed onto the UNESCO World Heritage list during 2009, and the setting of the WHS is protected by a designated buffer zone along with a number of other planning and conservation designations.**

**There are a number of green infrastructure components that contribute to the essence of the WHS and there are opportunities to enhance, protect and manage these. Furthermore there are opportunities for green infrastructure to provide linkages from the WHS to the nearby urban areas and deliver important socio-economic and environmental benefits, including sustainable housing growth.**



## Action Plan Areas

A key output of the Framework is to guide physical actions on the ground. These will be delivered by a number of action plans (see table below and plan on page 17) for priority areas which have been selected on the basis of research and consultation:

- Some areas need green infrastructure to address environmental deficiencies and improve quality of life and place (eg. WX2 – Wrexham Green Network & links to Pontcysyllte)
- Some areas already have a healthy and accessible natural environment which offers opportunity to sustain strong communities and viable enterprises (eg. CW1 – Chester City Centre & River Dee Park)
- Some areas are likely to experience rapid transformation and new development; offering an opportunity to plan for a robust green infrastructure and reverse past environmental damage (eg. CW3 – Ellesmere Port)
- Some areas have potential to become strategically important – in other words, they have a reasonable quantity and quality of assets, and by virtue of their location, could provide many more public benefits through better linkages and management to increase multi functionality (eg. W1 – Wirral Coastal Park & Wirral Way)

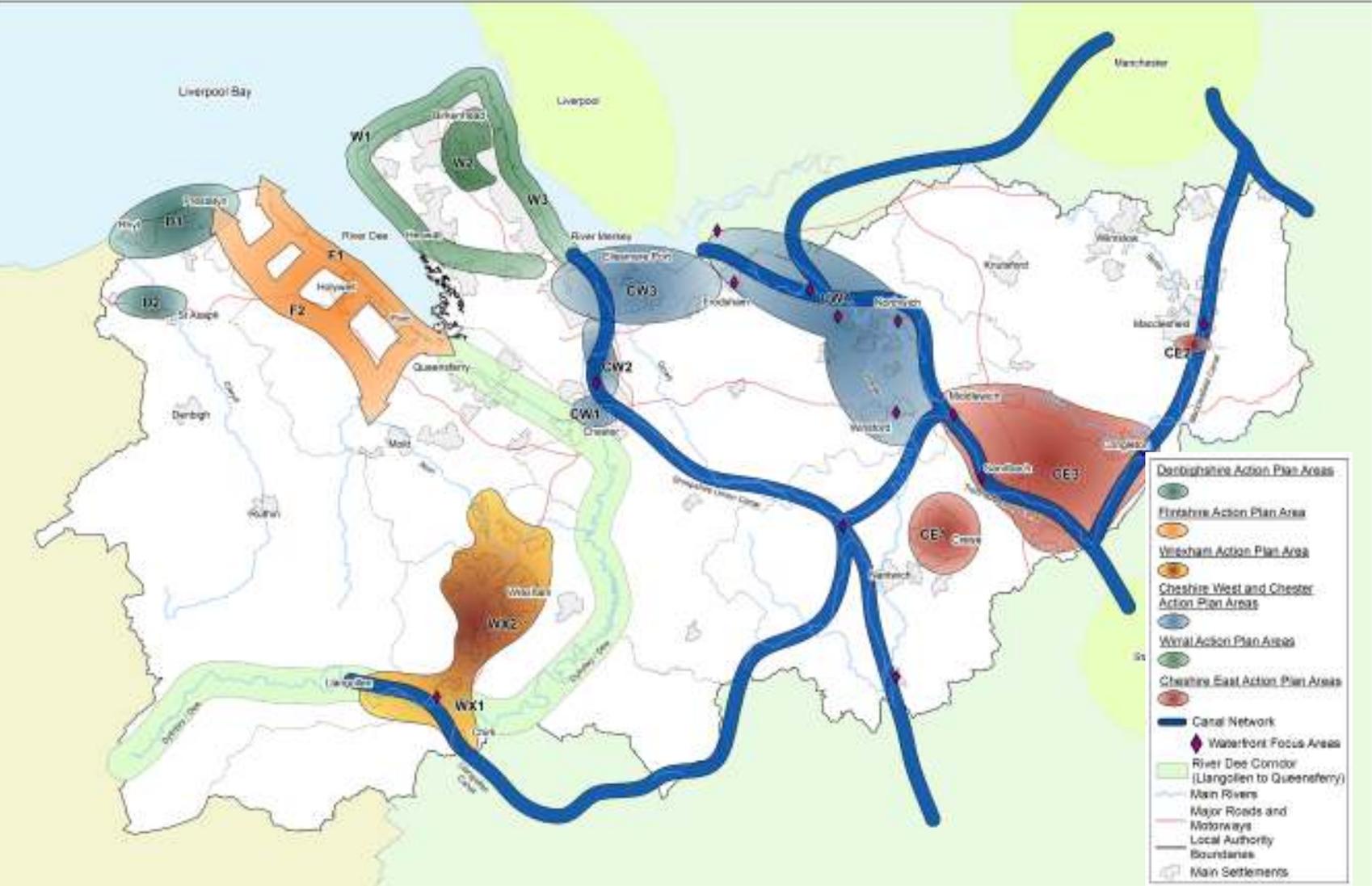
The Framework also identifies Integrated Environmental Management Areas (not shown on the Action Plan Areas Plan)– these are landscape-scale areas, primarily in rural use, where investment in environmental

enhancement, rural enterprise, access and biodiversity will bring particular benefits in the form of improved water resource management, tourism, climatic resilience and wildlife.

- Clwydian Range
- Cheshire Sandstone Landscape
- Middle Dee Catchment
- Weaver and Dane River Valley Networks
- Lower Dee Catchment and Estuary
- Cheshire Peak and River Bollin Farmlands
- Clwyd Valley, Ruthin, Denbigh

Ref.	Local Authority Area	Action Plan
D1	Denbighshire	Denbighshire Coast
D2	Denbighshire	Bodelwyddan & St Asaph Housing Growth
F1	Flintshire	Flintshire Coastal Towns
F2	Flintshire	Halkyn Mountain & Deeside River Valleys
WX1	Wrexham	Llangollen, Ruabon & Pontcysyllte WHS
WX2	Wrexham	Wrexham Green Network & links to Pontcysyllte
CW1	Cheshire West & Chester	Chester City Centre & River Dee Park
CW2	Cheshire West & Chester	Ellesmere Port & Chester business & housing renewal areas
CW3	Cheshire West & Chester	Ellesmere Port to the Mouth of the River Weaver
CW4	Cheshire West & Chester	Northwich and lower Weaver Valley
W1	Wirral	Wirral Coastal Park & Wirral Way
W2	Wirral	Birkenhead & Wallasey Housing
W3	Wirral	Mersey Shore
CE1	Cheshire East	Crewe – town centre & urban extension
CE2	Cheshire East	South Macclesfield urban extension
CE3	Cheshire East	Sandbach, Congleton, Alsager & Middlewich canal frontages and corridors

**Green Infrastructure Framework - Action Plan Areas**



# Delivery

For the successful implementation of GI actions, we need to use various delivery mechanisms, primarily through:

- Promoting Green Infrastructure in Policy – local authority led
- Development related funding and implementation – developer led
- Integrating Environmental Management funding – landowner & utility company led
- Leadership and co-ordination across the area

## Promoting Green Infrastructure in Policy

The development of Local Development Frameworks/Plans and subsequent Supplementary Planning Guidance/Documents gives us the opportunity to embed green infrastructure firmly within planning policy. Policy needs to promote GI and point towards guidance and standards for different aspects of GI.

Policy should reflect emerging national guidance as well as the aims and initiatives set out in this Framework. Public benefit and the need for multifunctional green space in rural and urban environments should be stressed, as should GI's role in mitigating and adapting to climate change. We suggest that development plan documents should specifically support and endorse this green infrastructure framework; as well as promoting cross boundary action and co-operation in support of the natural environment.

## Development related funding and implementation

There is a vital role for design guidance and standard-setting. An emerging body of documents can be referred to when setting standards for quantity, quality and functionality of open spaces and sustainable water management within development. For example, Local Authorities within Milton Keynes and South Midlands (see case study on page 19) and, separately in the National Forest, have adopted a developer guide that sets standards and contribution rates for different types and scales of development.



## Case study - Green Infrastructure By Design – A Guide for Sustainable Communities in Milton Keynes South Midlands

High levels of growth are projected for the Sub-Region of Milton Keynes South Midlands (mksm), and by 2021 the population is expected to grow by a further 750,000 people. This guide is about embedding high quality, sustainable and multi-functional GI into the design or 'place-making' process at a site level to add value to development. It encourages developers and designers to fully consider the opportunities and benefits for incorporating GI within their schemes that connects to the wider GI network beyond the site.



## Case study - Cambridge Sustainable Drainage Design Guide

To promote the use of sustainable drainage systems (SuDS) within Cambridge, the council has taken the decision to adopt SuDS that are located within public open space and produced the Cambridge Sustainable Drainage Design and Adoption Guide that sets out the council's requirements.



## Integrating Environmental Management

There are a series of landscape-scale heritage and natural assets stretching across North East Wales, Wirral and Cheshire, from the Clwydian Range to the Peak District, linked by networks of canal and river corridors and clusters of heritage attractions. Cross-boundary and cross-sector co-operation with management, enhancement and marketing of these assets will boost their functionality and maximise the ecosystem services they provide. This will involve joint working between landowners, developers, private companies, utility companies, local authorities and agencies such as Countryside Council for Wales and Natural England. There will be opportunities to pool or target environmental management funds to GI Priority areas.

## Leadership

The proposed GI Initiatives will be largely delivered through the development process or through partnerships and businesses that manage land. This will require leadership at the various levels of the Framework, including cross boundary, local authority scale and at neighbourhood level.

Leadership at Framework level is required to support strong cross boundary political leadership, sustain investment, robust partnership working and efficient working of the local planning system.

At Local Authority scale, leadership is needed to identify priority areas, work with local businesses, co-ordinate the development process, facilitate joint-working with neighbouring authorities, and promote the role of community groups in managing community assets.

At neighbourhood scale, leadership is needed to encourage local activism to plan local environmental enhancements, prepare funding bids and engage local people.



*Westminster Environmental Framework Plan, Ellesmere Port - Consultation*

# Next Steps

The Framework highlights the opportunities for investing in GI for North East Wales, Cheshire and Wirral in the coming 10-15 years. There is potential for this diverse area to become an exemplar for the planning and delivery of GI that attracts inward investment, provides an outstanding environment for living, enables local people to live healthier lives, encourages connected habitats for wildlife and prepares for climate change.

However, this potential will only be realised through the promotion and advocacy of GI and will need advocates to take up this responsibility and form partnerships in its delivery. These advocates include (although not on exhaustive list):

- Community groups and councillors
- Countryside Council for Wales
- Developers
- Environmental organisations
- Environment Agency
- Forestry Commission
- GI practitioners
- Landowners
- Local authorities

- Local enterprise partnerships
- Local nature conservation groups
- Natural England
- Town & Parish Councils
- Tree wardens
- Residents associations

A number of GI Action Plans will be prepared as the second stage of this Framework. These Action Plans will become exemplars for GI advocacy, partnership working and the enhancement and creation of many special places.





Genesis Centre  
Birchwood Science Park  
Warrington  
WA3 7BH

Tel: 01925 844004  
Fax: 01925 844002  
Email: [tep@tep.uk.com](mailto:tep@tep.uk.com)  
[www.tep.uk.com](http://www.tep.uk.com)

A copy of the main framework report is available from: [http://www.merseydealliance.org.uk/projects/green\\_infrastructure.aspx](http://www.merseydealliance.org.uk/projects/green_infrastructure.aspx)

