

David Pula

Lincolnshire Waterways Partnership

Lincolnshire Waterways Development Framework

July 2002

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British Waterways

Waterway Conservation & Regeneration Group

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The Locks
Hillmorton
RUGBY
CV21 4PP

Fearns Wharf
Neptune Street
LEEDS
LS9 8PB

Alexandra Warehouse
West Quay, The Docks
GLOUCESTER
GL1 2LG

☎ 01788 570625

☎ 0113 281 6800

☎ 01452 318 000

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Photographs are courtesy of Lincolnshire County Council and British Waterways.

Cover Photograph: Sleaford Navigation approaching Sleaford

Executive Summary

The Lincolnshire Waterways Development Framework has been developed to guide a major project to enhance the county's waterways. It has been led by Lincolnshire County Council and British Waterways and is supported by many other organisations in the county.

It seeks to provide a vision for the waterways that brings together economic, community and environmental issues and raises the profile of the Lincolnshire Waterways as a tourist destination for a variety of leisure uses. The vision is split into eleven aims. It is intended that the Framework will guide future management and development of the waterways and will provide a strategy to support applications for external funding. It also seeks to put Lincolnshire in its regional context, outlining key links to the national waterways network and other major waterway initiatives. Lincolnshire County Council has already allocated £9.7 m to the project, with the expectation that this will be matched from elsewhere. The total funding proposed is likely to be £15-20 m over five years.

The process of developing the Framework has been guided by two workshops. The first workshop helped in identifying eight key themes for the Strategy and these have led to a total of 98 Objectives to take the Framework forward. The second workshop helped in the development of a more detailed Action Plan for the first five years.

The eight Key Themes of the Framework are as follows:

- Improving the Existing Resource
- Extending the Network
- Developing Regional Links
- Developing Recreational Use of the Network
- Promoting the Waterways
- Business/Economic Development
- Engaging with Local Communities
- Developing the Partnership

Within each Key Theme the report summarises the current situation and provides a number of Key Objectives for the Partnership. These are then to be taken forward through the Action Plan.

Some of the major proposals included in the report are as follows:

- Implementation of waterway aspects of the Biodiversity Action Plan
- Protection and enhancement of the built and historic environment
- Incorporation of environmental improvements into flood defence works
- Restoration of the Louth Canal, the Horncastle Canal and the Sleaford Navigation

Lincolnshire Waterways Development Framework

- Creation of a new waterway link to the Fens
- Development of the Lincoln to Boston Cycle Route
- Provision of new boating facilities and waterways infrastructure
- Promotion of the waterways to a wider audience
- Provision of information, interpretation and exhibition facilities
- Provision of new facilities for villages and market towns
- Encouragement of new waterway-related businesses
- Encouragement of farm diversification and rural regeneration
- Working with local communities to address social inclusion
- Development of a stronger Partnership

Following on from the Development Framework, a five-year Action Plan has been developed. This identifies more specific actions and suggests potential lead agencies and other partners for each project. It also indicates potential sources of funding. The Action Plan has been divided into seven projects as follows:

- Lower Witham (Stamp End to Boston), Horncastle and Sleaford
- The Link
- Fosdyke
- Louth Canal
- River Ancholme
- Grantham Canal
- Marketing and Promotion

It is intended that the project will be taken forward through a strengthened Lincolnshire Waterways Partnership and it is likely that a Project Manager will be appointed to co-ordinate the implementation process.

Introduction

This Development Framework has been developed by Lincolnshire County Council and British Waterways with the support of a wide range of local authorities and organisations. It takes an holistic view of the waterways, seeking to develop them as a tourist resource, whilst retaining the many features of natural and historic importance. It seeks to provide new facilities for local communities and to support the development of new businesses in the county. This is the first time that a waterways regeneration strategy has been developed for a whole county, and it is envisaged this approach will link to future regional and sub-regional policies and proposals.

It is proposed to construct a new canal link, linking Lincolnshire to the River Nene at Peterborough and the much wider national waterway network. This will open up the county to greater use by visiting boats and create a major new cruising ring. By developing the waterways of Lincolnshire and building on their distinct character it is hoped to give Lincolnshire a distinctive edge in a growing tourism market, particularly for short breaks and waterway related tourism.

The terms 'peaceful', 'quiet' and 'unspoilt' are frequently used to describe Lincolnshire and it is essential that this character is retained whilst putting Lincolnshire firmly on the waterways map of the UK. It is hoped to broaden the range of attractions available, extend the seasons in which visits are made and build on the success of the coast in attracting tourists to Lincolnshire.

The Framework is to guide the co-ordinated development of the Lincolnshire waterways to provide the basis for a number of funding bids for the implementation of different aspects of the Framework. The Framework is supported by an Action Plan. The largest of these bids is intended to be a Round 3 Objective 2 bid for European funding to support the implementation of the Action Plan. Match funding of £9.7 m has already been allocated by Lincolnshire County Council and it is hoped that other partners will also be able to contribute.

The Lincolnshire Waterways Partnership

The production of this Framework has been led by Lincolnshire County Council and British Waterways, with contributions from the following:

- British Waterways
- Lincolnshire County Council
- West Lindsey District Council
- East Lindsey District Council
- North Kesteven District Council
- South Kesteven District Council
- Lincoln City Council
- South Holland District Council
- Boston Borough Council
- East Midlands Development Agency
- Environment Agency
- Lincolnshire Tourism
- Church Tourism
- Sustrans
- Inland Waterways Association
- Sleaford Navigation Trust

The Partnership is not formally constituted at present, but includes most of the major organisations involved with the waterways. The Partnership has a key link to the Lincolnshire Development Partnership (LDP) through all the local authority partners. The LDP is a sub-regional partnership that is likely, in future, to administer funds from Objective 2 (European funds) and the East Midlands Development Agency (National funds).

Aims of the Framework

1. To identify the priorities for the development and integration of social, economic and environmental issues as they relate to the waterways.
2. To develop a long term vision for the Lincolnshire waterways and develop a five-year Action Plan
3. To identify opportunities for improving the existing network of waterways whilst protecting the distinctive features of the rural landscape and ensuring their unique heritage, wildlife and traditions are conserved and enhanced.
4. To identify opportunities and key actions for extending the available network of navigable waterways through restoration schemes.
5. To consider Lincolnshire's waterways in their regional context as part of a much wider network.
6. To identify opportunities for improving the infrastructure of the county's waterways to provide varied and high quality opportunities for outdoor recreation, such as walking, cycling and horse riding, by local communities and visitors.
7. To identify opportunities to co-ordinate the marketing and promotion of the county's waterways to a much wider audience.
8. To assist the development of tourism businesses and employment opportunities, including the provision of healthy recreational pursuits and supporting service industries.
9. To develop a strong ownership and engagement by local communities in the development of waterways through local initiatives.
10. To establish a strong Partnership of key organisations to co-ordinate the development of the county's waterways.
11. To provide a co-ordinated framework of actions to aid bids for funding from local, regional, national and European funding sources

Policy Context

National Policies

The UK Government set out a framework for sustainable development in its publication, '**A Better Quality of Life: A Strategy for Sustainable Development for the United Kingdom**' (DETR 1999). The Strategy set out four main aims as follows:

- Social Progress which recognises the needs of everyone
- Effective protection of the environment
- Prudent use of natural resources
- Maintaining high and stable levels of economic growth and employment

Sustainable development is about achieving a balance between economic, social and environmental issues, and about taking a long-term view to consider impacts of our actions on future generations. This Framework seeks to apply these principles to the waterways of Lincolnshire.

Waterways for Tomorrow (DETR 2000) – This provides the blueprint for the development of the waterways network, incorporating the principles of sustainable development. The following quotes illustrate the approach recommended:

"The inland waterways are an important asset for future generations to enjoy and the Government is keen to see them maintained and developed in a sustainable way so that they fulfil their social, economic and environmental potential. We want to ensure that the many benefits and opportunities they provide are used to the full".

"The Government's overall aims for the waterways are to see an improving quality of infrastructure; a better experience for users through more co-operation between navigation authorities and increased opportunities for all through sustainable development"

Waterways for Tomorrow sees partnerships as the key to developing the waterways for the future. The following are a list of key issues to be addressed:

- Leisure and recreation, tourism and sport
- Heritage, the natural environment and education
- Regeneration
- Transport
- Freight
- Planning

This Framework seeks to apply the approach advocated in Waterways for Tomorrow to the whole of the Lincolnshire waterways network.

Regional Policies

East Midlands Regional Planning Guidance (East Midlands Regional Local Government Association 1999). This sets the regional priorities for land use planning and spatial development. The draft guidance includes the following policy in relation to waterways:

“Policy 5.42 Recreational use of existing and new waterways and lakes should be encouraged, having due regard to their role in the water supply system, their nature conservation capacity, their historic fabric, and any identified deficiency of water based leisure provision”.

Regional Economic Strategy (East Midlands Development Agency). This strategy seeks to guide economic development in the region by targeting the use of European and national Government funding. The Waterways Framework proposes to build on the following themes that relate to tourism:

- Distinctive regional and sub-regional characteristics
- Quality of the Region’s tourist product
- Green Tourism
- Cultural, arts and sports based tourism
- Rural tourism
- Natural assets
- Cultural and creative industries

The Economic Strategy is supported by Rural and Urban Action Plans.

County Policies

The Lincolnshire Development Partnership has developed the following Mission:

“an economically successful, accessible county, comprising a network of inclusive communities with an enviable quality of life, which is an integral part of its wider region”.

It has developed, with partners, the Lincolnshire Agenda to take this forward. This links closely with the Regional Economic Strategy and Regional Planning Guidance.

The Agenda has four key themes:

- Enterprise and employment
- Lifelong learning and skills

- Climate for investment
- Inclusive communities

An Objective 2 Implementation Plan entitled 'Access to Opportunity' has been derived from this Agenda. The six main priorities are about creating access to growth and opportunity and are as follows:

- Access through infrastructure (including waterways)
- Access to attractions
- Access to communities
- Access to skills
- Access to jobs
- Access through ICT

Development Plans. The planning system, and development plans in particular, are key to the delivery of sustainable development in relation to land use at the County and District level. All current development plans relating to Lincolnshire include policies which are supportive of waterway initiatives for regeneration and recreation. The recent Green Paper on planning has suggested that these plans may be replaced in future by Local Development Frameworks linked to Community Strategies.

Community Strategies. Since the Local Government Act 2000 all local authorities have a statutory duty to further the economic, social and environmental well-being of their area. In this respect links between development plans and the emerging community plans need to be established. Community Planning in Lincolnshire is being led by the Districts with the County taking a co-ordinating role. This is a key link that needs to be developed with each District Council if funding is to be sought for the implementation of the Action Plan and the improvement of facilities for local communities.

Local Environment Agency Plans (LEAPs). The Environment Agency have produced LEAPs for each of the river catchments in Lincolnshire. Each document identifies the key issues for that catchment and outlines a series of actions to be undertaken by the Agency and others. In producing this Framework, all the LEAPs have been reviewed and key actions have been incorporated into this report.

Tourism in Lincolnshire

Tourism in Lincolnshire has traditionally been dominated by the coastal resorts, with a smaller market in heritage, countryside, walking, horse riding, cycling and boating away from the coast.

Total visitor spending in Lincolnshire in 1999 was £ 807 m, with an estimated 18 m day visitors and 3 m staying trips (12.6 m nights). The majority of these visits were made by UK residents, with only £45 m coming from overseas tourism.

“A Sharper Focus” A Tourism Strategy for Lincolnshire 2001-2006 (Lincolnshire Tourism 2001). This sought to identify a shared vision for tourism in Lincolnshire, targets for growth and priorities for action. The four key priorities are as follows:

- A quality visitor experience
- New product development
- Increased marketing impact, and
- A progressive and responsible tourism sector

The Strategy also identified the following common themes and linkages for tourism projects:

- partnership;
- sustainability;
- inclusiveness;
- regeneration;
- customer focus;
- quality;
- conservation;
- economic benefit;
- integration;
- community involvement; and
- distinctiveness.

All these themes can be applied to waterway related initiatives.

Tourism supports 30,687 jobs in Lincolnshire (1999) and the Lincolnshire Agenda sets a target of 10,000 new jobs in tourism by 2010.

Waterways have been identified as being particularly suitable for day visitors and they are seen to have a key role in connecting urban and rural areas.

Key Theme 1 – Improving the Existing Resource

Description of the existing waterways network

The waterways network of Lincolnshire is made up of a combination of canals and river navigations, which are of great interest in the history of waterways in Britain. Map 1 shows the existing network of navigable and non-navigable waterways in the county.

River Ancholme. The River Ancholme is currently navigable from the Humber Estuary at South Ferriby to Harlam Hill Lock at Snitterby. Improvements to the river date back as far as the 13th century and its predominant use was to carry cargo from the rural areas of Lincolnshire to the industrial towns of Yorkshire and beyond.

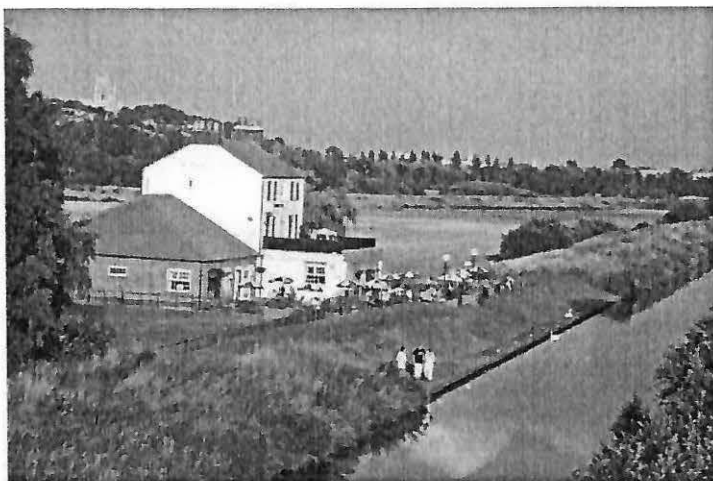
The river has been greatly modified for navigation and land drainage purposes and flows through a largely straight channel across productive arable land. The Environment Agency is the navigation authority.

River Trent. The River Trent runs along the county boundary between Lincolnshire and Nottinghamshire. The whole length within Lincolnshire is tidal, but is navigable with care. There is currently some use of the waterway for freight. The main riverside facilities are to be found at Gainsborough, where a waterfront regeneration initiative is being undertaken. British Waterways is the navigation authority upstream of Gainsborough and Associated British Ports downstream of Gainsborough.

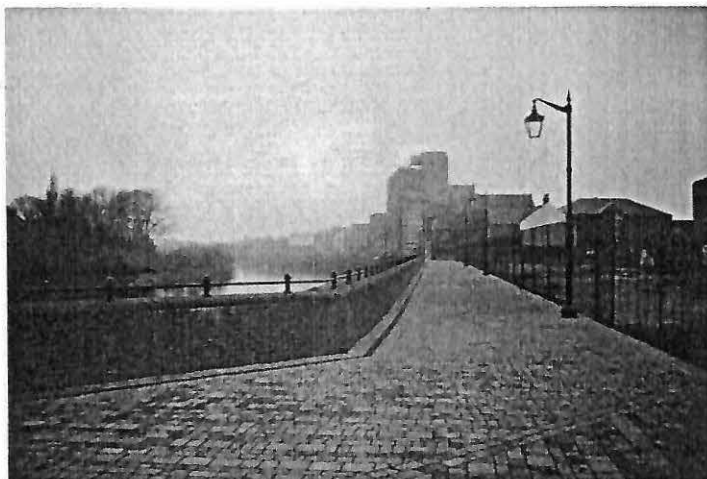
Fosdyke. The Fosdyke is thought to be the oldest canal in Britain, having been constructed about 2000 years ago by the Romans for navigation and land drainage purposes. It starts on the River Trent at Torksey and finishes at the Brayford Pool in the centre of Lincoln. The canal has many long straight stretches and is often bounded by high banks, allowing few views of the surrounding landscape. The Brayford Pool provides a major facility in the centre of the city, which has further scope for development. British Waterways is the navigation authority.

River Witham. The River Witham rises at Colsterworth near Grantham and flows for 30 miles before reaching Brayford Pool in Lincoln. This length is not navigable, but is accessible by cyclepath between Lincoln and North Hykeham. The river flows through the centre of Lincoln, passing through the 'Glory Hole', a low bridge which has always created a restriction to navigational use by large craft. The Witham flows from Lincoln to Grand Sluice in Boston. Below the Sluice it is tidal. The whole length of the river has historically been canalised and serves an important function in terms of land drainage and flood defence, as well as navigation. Long stretches of the river are straight and uniform in profile, providing little variety for boating. British Waterways is the navigation authority.

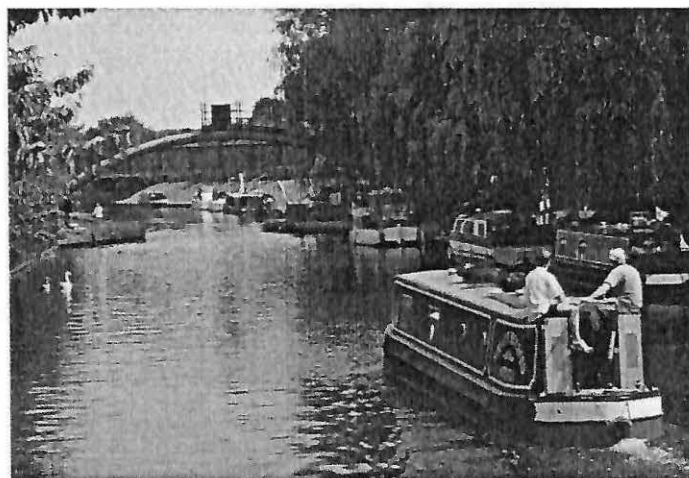
Witham Navigable Drains. These drainage channels, or 'dykes' were originally constructed to drain surrounding land for agricultural use. They started to be made navigable in the 1500s. There is currently a network of about 90 miles of navigable waterways, with only one connection to the River Witham at Antons Gowt Lock. The standard of navigation in the channels is quite variable and there is currently little use made of these waterways. Navigation responsibility for these drains is generally by the



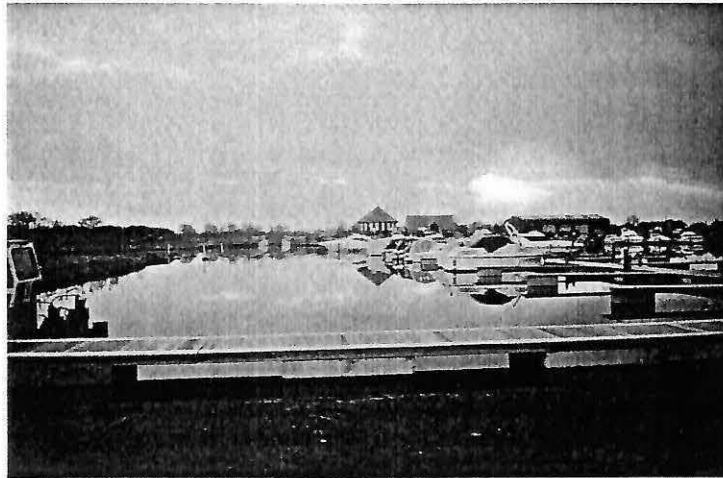
River Ancholme at Brandy Wharf



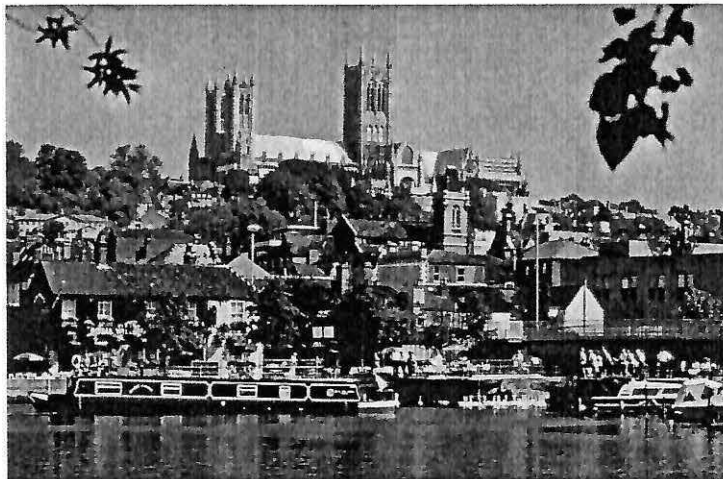
River Trent at Gainsborough Waterfront



Fossdyke at Saxilby



New Development at Burton Waters



Brayford Pool in Lincoln



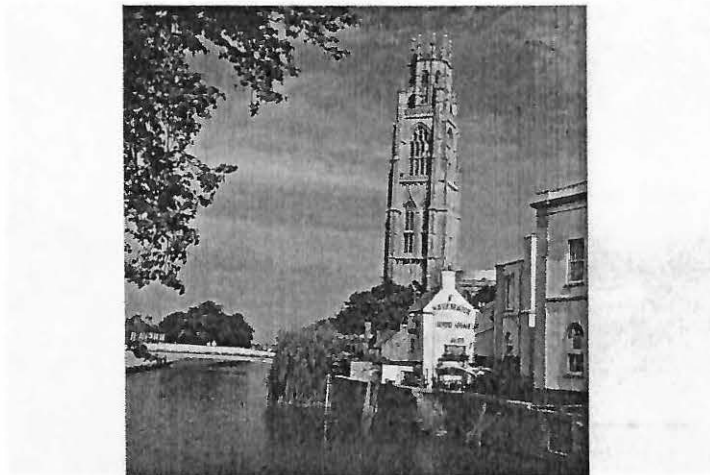
River Witham at Dogdyke



Cyclists by the River Witham



New Cycleway from Boston to Antons Gowt

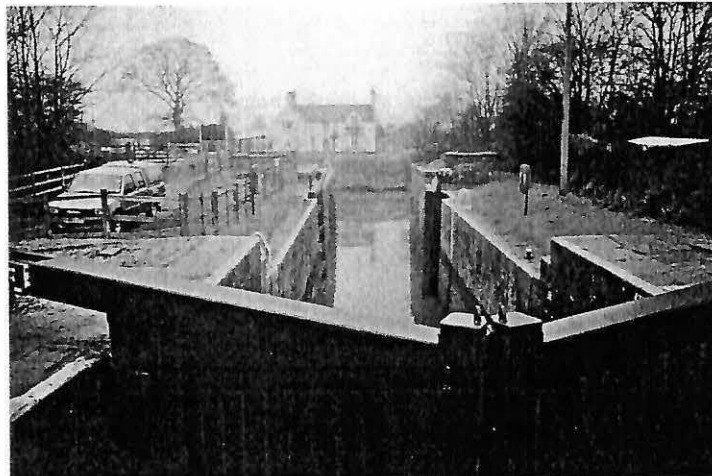


Boston Stump and River Witham

Lincolnshire Waterways Development Framework



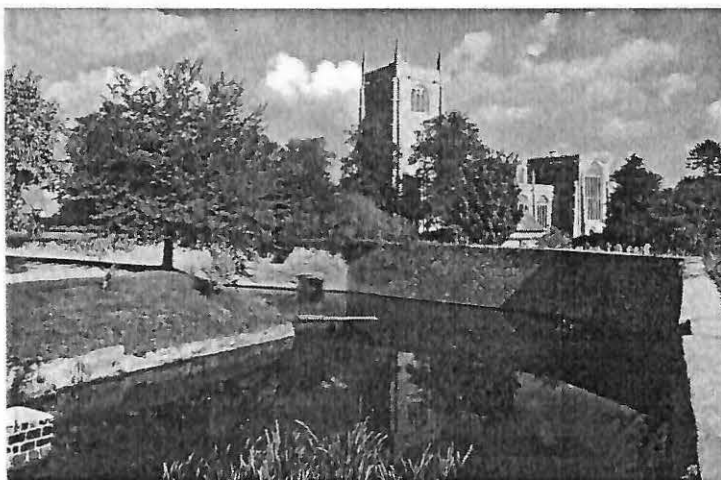
Maud Foster Drain and Windmill, Boston



Entrance to the Witham Navigable Drains at Antons Gowt Lock



Cowbridge Junction and Lock



The Horncastle Canal at Tattershall v&H



Navigation House in Sleaford LB



River Slea at Cogglesford Mill near Sleaford



Haverholme Lock on the Sleaford Navigation



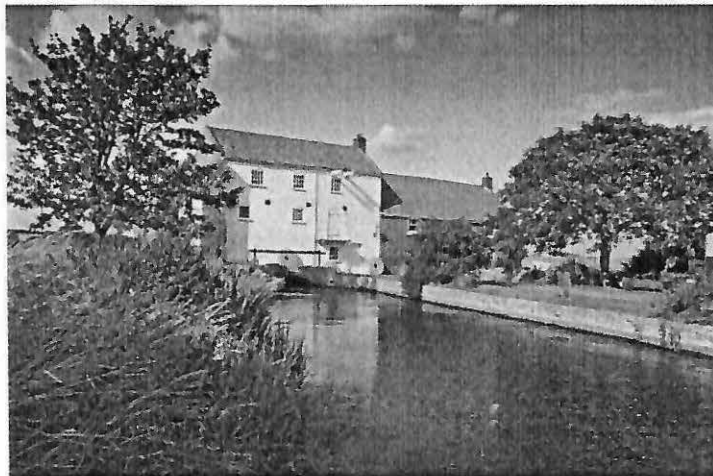
Sleaford Navigation at Chapel Hill



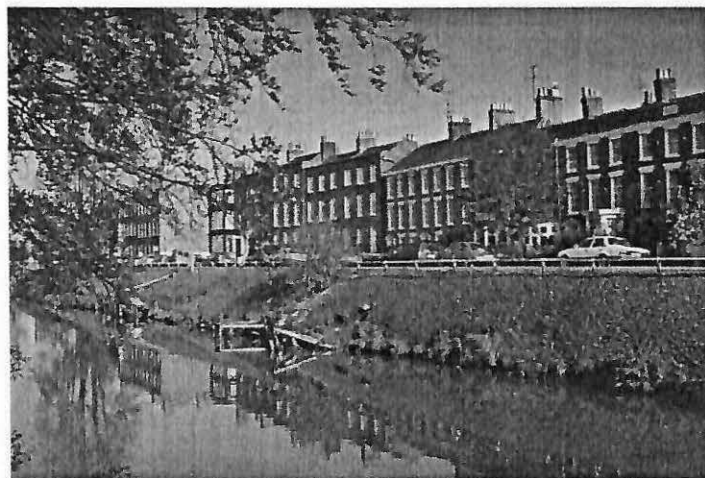
Riverhead at Louth



Barrel sided lock at Alvingham Lock on the Louth Navigation



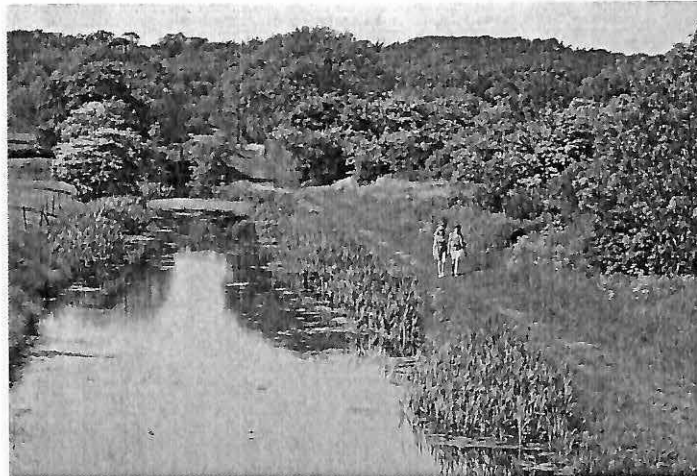
Alvingham Mill on the Louth Navigation



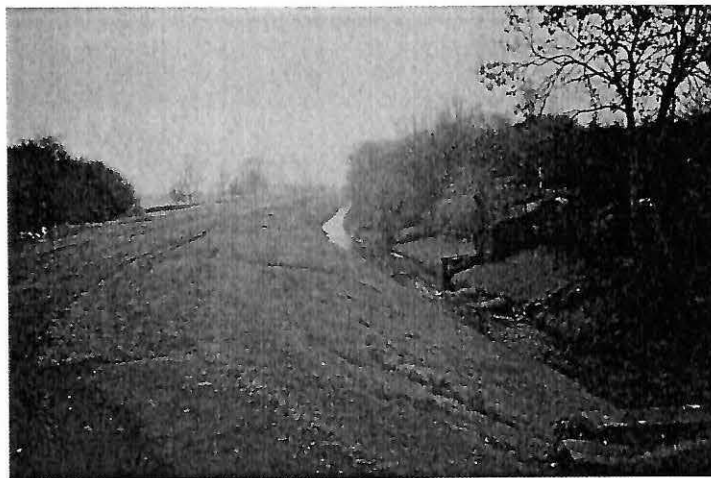
River Welland at Spalding



River Glen close to the Welland confluence



The Grantham Canal at Woolsthorpe



The Car Dyke at Martin

Witham Fourth Internal Drainage Board, but the Environment Agency takes an overview of the land drainage aspects.

Horncastle Canal. The Horncastle Canal was originally two canals, the Horncastle Canal and the earlier Tattershall Canal, and the whole length was opened in 1802. The main length of the canal was created by the canalisation of the River Bain. It had two branches within Horncastle and two links to the River Witham at Tattershall. The total length is about eleven miles.

The canal is currently unnavigable, but has an important role in flood defence and land drainage. There is currently no navigation authority for the canal, but restoration is being promoted by the Horncastle and Tattershall – Coningsby Heritage (HATCH) Group.

Sleaford Navigation. The Sleaford Navigation extends for 13 miles from Sleaford to the River Witham at Chapel Hill. It was opened in 1794 to link Sleaford to Lincoln and Boston. Much of it was created by canalisation of the River Sleas and Kyme Eau.

The route is currently navigable for about eight miles from the River Witham up to Cobblers Lock. Restoration to Sleaford will be dependent on the outcome of detailed studies on water resources. Within Sleaford the former canal basin is being regenerated for business and leisure use.

Louth Canal. This was one of the earliest canals in the country, having been opened in 1770. It extends from Riverhead in Louth to the Humber Estuary at Tetney Haven, a distance of about 12 miles. It is unique in that it has a number of barrel-sided locks. The canal is not directly connected to the national network and will only be accessible to sea-going vessels.

The canal is currently unnavigable, and restoration is being promoted by the Louth Navigation Trust. They have previously restored the Navigation Warehouse in Louth. There is currently no navigation authority, although much of the length is owned by the Environment Agency. The seaward end of the canal passes through the Tetney RSPB reserve.

South Forty Foot Drain (or Black Sluice). This waterway connects the River Glen at Guthram Gowt to the River Witham at Boston. It was created for land drainage purposes, but has been used at times in its history for navigation purposes.

The waterway is currently unnavigable, but it is proposed to re-open it to create a navigable link from Peterborough to Boston, so boats can avoid the tidal areas of the Wash. The channel is very straight and uniform and will need to retain its land drainage function. There is no nominated navigation authority, but both the Environment Agency and Internal Drainage Boards have a major interest.

Rivers Welland and Glen. These rivers have been major waterways across the Fens for thousands of years. The Welland is navigable from just below Stamford to the Wash, a distance of 35 miles. For powered boats the practical limit is at Peakirk north of Peterborough. It flows through an area of rich farmland and the town of Spalding, and much of it is within a canalised channel.

The River Glen is navigable from Guthram Gowt to its confluence with the Welland downstream of Spalding.

The Environment Agency is the navigation authority for both rivers.

Grantham Canal. The Grantham Canal extends for 33 miles from Nottingham to Grantham. It crosses into Lincolnshire near Woolsthorpe and about six miles are in Lincolnshire. The waterway is owned and managed by British Waterways and there is a long term aim to restore it to navigation. It is currently being developed as a leisure and tourism resource. There is a major obstacle to be overcome in restoring a crossing of the A1 to connect the canal to its original head of navigation in Grantham.

Car Dyke. This is an ancient Roman waterway running north to south across the county. It is not navigable, but is in some places used for land drainage and flood defence purposes. The line of the Dyke can be traced along some sections of its length.

Countryside Character Areas

The Countryside Agency has developed a national map of Countryside Character Areas. Eight of these are either wholly or partly in Lincolnshire. The Agency have identified the key features and a number of proposals for shaping the future of the county's landscape. Waterways are featured in six of these Character Areas and within each of these waterways and wetlands are identified as priorities. The table below summarises how the Character Areas relate to the waterways that are the subject of this Framework.

The Character Areas are used to target funding through the Countryside Stewardship scheme, administered by the Department of Environment, Food and Rural Affairs (DEFRA).

Objective 1: *Develop the waterways aspects of the Countryside Character Areas wherever possible, and particularly through improvement projects, restoration schemes and appropriate development proposals.*

Objective 2: *Work with DEFRA to ensure that waterways issues are included in the Lincolnshire Targeting Statement for the Countryside Stewardship Scheme.*

Table 1 - Countryside Character Areas Related to Waterways

No	Character Area	Applicable Waterways	Proposals for Shaping the Future
39	Humberhead Levels	River Trent	Protection of semi-natural habitats. Management regimes for rivers and dykes, which are sympathetic to nature conservation and the landscape.
42	Lincolnshire Coast and Marshes	Louth	Small to medium sized woodland, linked by hedgerows to emphasise watercourses, recreation of floodplain grasslands, enhancement of ditches and dykes for wildlife.
44	Central Lincolnshire Vale	Ancholme, Witham (forms boundary), Horncastle	Hedgerow reinstatement, new woodland on open clay farmland, wet grazing, washlands, freshwater habitats on the Ancholme.
47	Southern Lincolnshire Edge	Slea	Hedge restoration, wider field margins, increase in grassland.
46	The Fens	Lower Witham, Witham Navigable Drains, Welland, Glen	Retention of large scale vistas, clumped tree planting, new woodlands on clay 'islands', grassland, wetland, shelter belts, hedgerow planting, management of drainage dykes, reprofiling watercourses, wetland and grassland buffer strips, field margins, recreation of sizeable areas of wet swamp fenland, washlands for winter storage, grazing marshes.
48	Trent and Belvoir Vales	Grantham	Restoration of riparian pastures and water meadows, restoration of riparian vegetation.

Lincolnshire Biodiversity Action Plan

The Lincolnshire Biodiversity Action Plan was published in 2000 by the Lincolnshire Wildlife Trust. It identifies a number of Species Action Plans and Habitat Action Plans and a number of these relate to the waterways environment. Those relevant to the waterways are summarised in the following tables.

Table 2 – Species Action Plans

Species Action Plan	Protected Status	Relevant Waterways	Actions
Water voles	Wildlife & Countryside Act 1981	Very good populations everywhere	Opportunities for habitat improvements. Ensure that mink do not become a problem. Key species in the limestone areas.
Otters	Wildlife & Countryside Act 1981 European Species	Bain, Horncastle, Slea, Witham, Grantham, Lower Trent	Enhancement work in Lower Trent. Lack of habitats throughout main rivers; EA encouraging buffer zones along watercourses.
Grass wrack pondweed	Wildlife & Countryside Act 1981	Grantham Canal, Wash	Maintain the range and enhance the population size. Facilitate colonisation of new sites. Install buffer strips.
Spined Loach	European Species	West Fen Drain, South Forty Foot, Glen, Witham & tribs, Hobhole, Grantham, Ancholme	Research ecology and habitat preferences. Survey and monitor populations. Maintain and enhance populations through habitat management and reduction in eutrophication.
Compressed River Mussel		Witham – Kirkstead Bridge to Langrick Bridge, Welland.	Identify new and maintain known populations. Identify habitat preferences.
White Clawed Crayfish	Wildlife & Countryside Act 1981 European Species	Witham, Bain above Horncastle.	Maintain Upper Witham population through habitat management. Limit spread of non-native crayfish.
Witham Orb Mussel		Witham	Maintain water quality and protect habitats.

Table 3 – Habitat Action Plans

Habitat Action Plan	Relevant Waterways	Actions
Rivers, Canals and Drains	All	The lower reaches of the county's waterways are seen as wildlife sanctuaries in the largely arable countryside. Form wildlife refuges and corridors. Threats are water abstraction; chemical enrichment and pollution; navigational and flood defence structures and impoundments; climate change; land drainage and waterway management; fishing and fish farming; development within the floodplain; and loss of native fauna. Actions include habitat improvement programmes; 20% of rivers with buffer strips.
Reedbeds	All	One of the five key habitats in the county. Key habitat in the coastal area. Opportunities for habitat creation should be sought along all waterways.
Standing Water (eutrophic)	All	One of the five key habitats in the county. Opportunities for habitat creation should be sought along all waterways.

Site Protection. Lincolnshire has a number of sites protected for their nature conservation value. Sites designated as Sites of Special Scientific Interest (SSSIs) and Sites of Nature Conservation Importance (SNCIs) must be protected when any works are undertaken and there may be opportunities to manage these sites better.

The waterway network of Lincolnshire is surrounded by wetland habitats of international importance along the Humber Banks and the coast down to Mablethorpe, and the Wash. Baston Fen, adjacent to the River Glen is also protected by European legislation.

Bird Conservation. The Royal Society for the Protection of Birds (RSPB) operates a harrier protection scheme around the Wash and inland Lincolnshire, and this includes the Lincolnshire waterways. The scheme aims to safeguard marsh and Montagu's harriers by nest protection, provision of advice and monitoring. The key to helping marsh harriers on Lincolnshire waterways is to allow areas of undisturbed, reed fringes to become established, these areas should not be cut between March and August to allow harrier's to nest successfully. Barn owls will also make use of these areas and reed warbler, sedge warbler and reed bunting all nest in the reeds.

The development of buffer zones between arable land and watercourses will provide a major benefit for birds. The RSPB are also involved in proposals to create washlands on the Witham and Welland and have coastal nature reserves at Frampton Marsh, Freiston Shore and Tetney.

Countryside Stewardship. The Farming and Wildlife Advisory Group (FWAG) are very active in working with landowners and are currently creating over 1200 acres of new wetland per year, with funding of £1.3 m through Countryside Stewardship. Countryside Stewardship provides a multi-objective package, with funding, for habitat creation and

management, landscape, archaeology and access. The Witham and the Wash have been targeted, but there is scope for more large schemes in the Fens. Countryside Stewardship can also fund 6 m uncropped margins and reversion to grassland adjacent to waterways. A new measure for farmland birds is to be introduced this year, targeting the Witham Valley for retention of overwintering stubbles. The eligible area covers a 6 km wide corridor adjacent to the river and projects should be 4-5 ha per holding.

The **Fens Floodplain Project** aims to demonstrate how floodplain wetlands can contribute to the sustainable use of water resources in the Fens of Norfolk, Suffolk, Cambridgeshire and Lincolnshire. A 'Planning for Floodplains' technique has been developed to involve sample communities in the restoration of floodplains. An 'Analysing Barriers to Change' methodology has been developed to understand policy and funding barriers. Also the project seeks to establish project partnerships and to influence other plans. It forms part of an international 'Wise Use of Floodplains' project (EU Life funded). Priorities for Lincolnshire are a 900 ha wetland creation proposal at Thurlby Fen near Bourne and wetland creation projects in association with the Lower Witham Flood Defence Scheme. A Water Forum for the Fens has been established to co-ordinate work on wetlands throughout the Fens.

Waterway Management. A lot of wildlife benefits can be gained through the better management of waterways for wildlife. The environmental value of these areas can be improved as well as providing a more attractive environment for encouraging tourism and recreation visits. The Local Environment Agency Plans (LEAPs) for the Witham and Grimsby/Ancholme identified a significant reduction in the area of river and wetland habitats and associated species. The Agency, working with partners, is seeking to conserve existing wetland habitats and create new ones. They also propose to deal with invasive alien plants which threaten ecological diversity, as well as, in the case of giant hogweed, providing a health hazard for visitors.

The Ancholme is known to have some interesting nature conservation features, and these have been enhanced by North Lincolnshire Council, who have created 5 km of buffer strips downstream of Brigg through Countryside Stewardship.

The Fosdyke is particularly poor from a wildlife conservation point of view and major environmental improvements are needed, particularly between Burton Waters and Saxilby.

Objective 3: *Compile a database of the distributions of key biodiversity species and, wherever appropriate, incorporate improvements in their habitats into any project proposals.*

Objective 4: *Incorporate wildlife habitat improvements into waterway proposals wherever appropriate to help achieve targets in Habitat Action Plans, which form part of the Lincolnshire Biodiversity Action Plan.*

Objective 5: *Ensure that sites protected for their nature conservation importance are not damaged by any development proposals and that all opportunities are taken to improve their management for the benefit of wildlife and, where appropriate, for visitors.*

Objective 6: *Review maintenance of the waterways to stop the decline in habitat quality and incorporate habitat improvements in riparian areas.*

Objective 7: *Identify and implement a programme of habitat improvements along the Fosdyke, which do not compromise the waterway's flood defence function.*

Objective 8: *Develop a control programme for giant hogweed where it presents a health hazard for waterway users.*

Objective 9: *Work closely with the Environment Agency, RSPB, FWAG and the Fens Floodplain Project to ensure a co-ordinated approach to major wetland creation projects in the Fens and a joint approach to developing these as green tourism projects.*

Built Environment

The waterways of Lincolnshire and their adjacent land contain many important buildings and structures of historic interest. Many are listed by local authorities or protected by Scheduled Ancient Monument status. Careful management is required to retain these structures, and they also provide opportunities for interpretation of the history of waterways.

There are a number of opportunities to improve the built fabric of the waterways through regeneration projects. Major projects include the regeneration of the riverside in Gainsborough, the development of Brayford Pool and industrial sites in Lincoln, the Hub Contemporary Arts Centre in Sleaford, the improvement of the Port of Boston and the conservation of the unique barrel-sided locks on the Louth Canal.

The River Ancholme has a unique collection of historic bridge structures, which have recently undergone survey work and been renovated by the Environment Agency. They will require careful maintenance and can be developed as tourist attractions.

Another important structure is Torksey Viaduct across the River Trent, which is owned by Railway Paths Ltd and provides the opportunity for a traffic-free, multi-user crossing of the Trent.

Objective 10: *Ensure the protection of the important built fabric of the waterways when considering enhancement proposals.*

Objective 11: *Support major regeneration projects to improve the built environment at Gainsborough, Lincoln, Sleaford and Boston.*

Objective 12: *Carry out a project to conserve and promote the bridge structures of the Rivers Ancholme and Trent to encourage tourism in the area.*

Historic Environment

Lincolnshire is unique in the country in that it has canals dating back to Roman times. The Fosdyke and Car Dyke were developed by the Romans for drainage and navigation purposes. The Car Dyke is thought to have been built with the primary function of land drainage, but may also have been used as a navigation. Its course ran from the River Cam near Waterbeach to the Fosdyke near Lincoln and it was 73 miles long with an original width of 50-60 feet. It would have enabled villages at the heads of lodes (cuts off the dyke) to trade across the Fens and a wide area of the country. Ten sections of the Dyke are currently protected as Scheduled Ancient Monuments. The route of the canal can be traced in many places and parts of it are used for flood defence and land drainage. It provides a major resource that can be developed and used to encourage tourism. Walking and cycling routes linked to the Dyke, with associated information, could be developed.

Along the Lower Witham a number of ancient priories have been discovered, each at the head of a causeway leading to the river. A number of important Iron Age features have also been found in the area. Finds include barrow cemeteries and Iron Age log boats, which are considered to be of national importance and international interest. A number of abbeys and granges have also been found in the area. Work on these sites is being co-ordinated by a Working Group led by English Heritage and Lincolnshire County Council. It is essential that any other work proposed in this area takes these features into account. There is a major opportunity for interpretation and tourism development here, and it is hoped that one of the historic causeways can be recreated at Fiskerton to create an international draw for tourists.

As part of the interpretation of the waterways an Oral History Project could be developed. This would record on tape people's recollections of the waterways during their lifetimes. The resulting recordings could form an important county archive and form a major element of interpretation facilities throughout the county. A partnership with a local radio station could raise the profile of this project and the waterways in general.

Objective 13: *Develop interpretation facilities on the Fossdyke to promote its significance as the oldest man-made waterway in Britain.*

Objective 14: *Assess the current condition of the Carr Dyke and identify opportunities for promoting it as a tourist facility through linking walking and cycle routes and information provision.*

Objective 15: *Promote the unique Bronze Age and Iron Age archaeology adjacent to the Lower Witham, provide interpretation and support the restoration of an Bronze Age causeway at Fiskerton.*

Objective 16: *Develop an Oral History Project relating to the county's waterways in association with the county archives and a local radio station.*

Water Quality

The Environment Agency have identified poor water quality in a number of sites or stretches of the county's waterways. Particular areas of concern are the Witham, Ancholme, Welland and Louth Canal. Eutrophication (nutrient enrichment) is a problem in several places and the Witham is a Sensitive Area (Eutrophic) under the EC Urban Wastewater Treatment Directive. Work on these issues will be undertaken by the Agency under its statutory duties, but there are opportunities to reduce nutrient-rich run-off from arable land through the introduction of buffer zones alongside watercourses. These zones will have the added benefits of improving wildlife habitats and creating a more attractive environment for visitors. Advice on these issues needs to be co-ordinated in association with the Environment Agency, the Farming and Wildlife Advisory Group and DEFRA.

Objective 17: *Work closely with the Environment Agency and others to identify opportunities for improving water quality through changes in land management practices and the introduction of buffer zones.*

Water Resources

Water resources are a key issue for the Lincolnshire waterways. The predominance of high grade agricultural land results in very high levels of licensed abstractions. Consequently the River Witham has to be supported by water transfer from the River Trent to the Fossdyke. Some of this water is then pumped from the Witham into the Ancholme to provide for water supply for the industry along the south bank of the Humber Estuary.

Use of the Trent – Witham – Ancholme River Transfer Scheme is controlled by the Environment Agency. This, along with variations in rainfall, results in considerable variation in flows, particularly in the Lower Witham. Demand and commitment for water use are considered to be in close balance and the sustainability of abstraction is being addressed by a Catchment Abstraction Management Strategy for the Witham, which is to be developed by the Environment Agency by Summer 2003.

Other water resources issues which may impact on navigation are on the Welland and Glen where demand exceeds available flows in the lower river in dry summers, and on the Slea, where a compensation borehole is used to help sustain and support river flows.

Objective 18: Ensure that navigation and waterway recreation issues are fully taken into account in the development of the Catchment Abstraction Management Strategy for the River Witham.

Flood Defence

The Lower Witham is a key area for flood defence with over 300 km of flood embankments. The Environment Agency published the Lower Witham Strategy Study in May 1997 to address options for raising the existing level of flood protection to 1 in 10 years and longer term to cater for 1 in 25 year flooding. Consultees were in favour of using a flood storage option and a 1 in 25 standard is justifiable from the economic analysis. The Environment Agency has produced a 50 year strategy for improving the flood defences on the Lower Witham, downstream of Lincoln. To improve the flood defence standard, the Strategy recommended a phased programme of stabilisation of weaker lengths of the banks combined with the provision of storage areas. The works are phased over ten years and began in 2001. The full scheme will cost £40 m. The creation of storage areas is planned to commence in 2005/6 and they may provide an opportunity to create valuable wildlife habitat and a recreational resource. The Agency is currently liaising with landowners to identify sites that are appropriate to meet the flood defence criteria. They will need to work closely with archaeologists to ensure that no damage is done to the important archaeology of the area.

At Boston the Agency is undertaking a study looking at existing and future standards of tidal protection with a view to developing a flood defence strategy for the town. A proposal from the Port of Boston for a tidal barrier may be considered in this appraisal along with a range of other options. Such a barrier would need to cross the narrowest point, and would normally remain open, but be closed in the event of a flood caused by the tide.

The Witham Navigable Drains are managed by the Witham Fourth Drainage Board with the principal function of land drainage. Water levels are raised in summer to aid navigation and lowered in winter for land drainage purposes.

On the Fosdyke, flood defence issues will need to be fully considered in developing new wildlife habitats or recreational facilities. One particular issue is the appearance of the

flood wall adjacent to the golf course between Pyewipe and Lincoln. Bank improvements should be discussed between British Waterways and the Environment Agency to improve safety, environmental and aesthetic aspects.

The Environment Agency are proposing flood defence works in the Bain Valley. The strategy includes flood storage areas upstream of Horncastle which will have the benefit of avoiding unnecessary disturbance of the channel. Washland areas are being designed to provide flood storage. The data collected as part of the Bain Flood Alleviation Scheme will aid the investigation into how the summer flows can be augmented to aid navigation. This issue will need to be addressed in assessing the feasibility of canal restoration. Additional funding would be required as it could not be met through flood defence funding and would not form part of the works to be undertaken shortly. The Farming and Wildlife Advisory Group are advising on the conservation aspects of this project and are working with local landowners.

The Environment Agency are undertaking a flood defence scheme on the River Ancholme, looking at flood defences for Brigg and the whole valley. They are considering the use of flood storage options, which may incorporate conservation projects, including wetland creation. Archaeological aspects are also being considered.

It needs to be borne in mind that the proposed flood storage areas on the Ancholme, Bain and Lower Witham may offer an opportunity for creation of wetlands in addition to their flood storage function, but this is dependent on additional funding, partner commitment and landowner consent.

Flood defence predictions for Lincolnshire need to bear in mind that sea level rise may affect large parts of Lincolnshire and make flooding problems worse.

Objective 19: Work with the Environment Agency on the Lower Witham Flood Defence Scheme to develop major washlands and wetland areas that can be developed to incorporate visitor facilities.

Objective 20: Work with the Environment Agency on the Flood Defence Scheme for the Upper Bain and investigate the possibility of using existing data to identify opportunities for storage facilities for summer release to facilitate navigation in the Horncastle Canal.

Objective 21: Work with the Farming and Wildlife Advisory Group to co-ordinate the provision of advice to landowners on wetland creation projects adjacent to the waterways.

Objective 22: *Work with the Environment Agency on flood defence projects on the River Ancholme to seek to incorporate improvements to the environment and visitor facilities.*

Fisheries

The Lincolnshire waterways and their tributaries provide important fisheries for coarse fish populations. There is, however, concern on the River Witham that the distribution of fish has had an impact on anglers and there is a need to build up their confidence. The Witham Local Environment Agency Plan (LEAP) identified the issues of poor quality match angling, degraded habitat and river management practices.

The Witham Navigable Drains are particularly important for match fishing and the Hobhole Drain is considered as an important angling location. It is essential in this area to ensure that coarse fish populations are carefully managed.

When undertaking any work on the waterways, the impact on fisheries needs to be addressed. Weirs, locks and other impoundments, in particular, are barriers to the free passage of fish. River control structures are particularly thought to have an impact on the Welland.

Objective 23: *Identify and implement habitat improvements and review river management practices to help to boost coarse fish populations and restore the confidence of anglers in using the Lincolnshire waterways.*

Objective 24: *Ensure that the movement of fish populations is fully considered in the design of any in-channel structures.*

Navigation

Navigation in most of Lincolnshire is managed by British Waterways and the Environment Agency. British Waterways is the navigation authority for the Lower Trent, upstream of Gainsborough, the Fosdyke and the Witham. The Agency is the navigation authority for the Ancholme, Welland and Glen. Associated British Ports are the navigation authority on the Trent below Gainsborough and the Port of Boston on the Witham below Grand Sluice. There are currently no navigation authorities for the non-navigable waterways.

It is currently unclear who has the navigation responsibility for the Witham Navigable Drains. Generally the Witham Fourth Internal Drainage Board accept responsibility, but many of the Drains are 'main river' controlled by the Environment Agency. Although their principal purpose is drainage, it is essential that navigation issues are fully considered and opportunities are taken to develop navigable use of these waterways. In this area there

are about 90 miles of navigable waterways. The maintenance of Cowbridge Lock is an important issue for encouraging use of this area.

Objective 25: Clarify responsibilities for navigation in the Witham Navigable Drains and identify opportunities for improving navigation and the provision of infrastructure for use by visiting boats.

Existing Waterways Projects

The Fens Waterways Regeneration Strategy was published in 1997 covering the whole of the Fens. Its aim was to be 'a strategic assessment of the navigations and their adjoining corridors' potential for leisure and tourism development'. A Waterway Project Officer was appointed for three years to take the project forward. The key objectives of the Strategy were as follows:

- Promotion of navigation and recreation
- Maximise economic, environmental and social opportunities
- Increase use by local communities, businesses and visitors
- Ensure balance between different uses

The key themes of the Strategy were:

- Landscape and infrastructure improvements
- Routes and trails
- Village and community initiatives
- Town corridor schemes
- Site specific development proposals
- Promotion and marketing

There are clearly important links with the Lincolnshire Waterways Framework and close collaboration between the two initiatives will benefit both.

West Lindsey Waterways Strategy was published in 2001 and included an audit of facilities and resources for boating, watersports, angling, informal recreation and other leisure pursuits. It assessed the current and potential future usage and developed a project programme for the next five years. This Strategy will link into the Lincolnshire Waterways Framework and provide the next level of detail to assist in project implementation.

Lincoln Waterways Strategy was developed in 1997 by Lincoln City Council and British Waterways. It outlines detailed proposals for landscape improvements for the waterways

within the City boundary. As with West Lindsey, it provides the next level of detail to guide implementation.

Objective 26: Establish a close working relationship with Fens Tourism to link with the implementation of the Fens Waterways Regeneration Strategy.

Objective 27: Establish a close working relationship with West Lindsey District Council to link with the implementation of the West Lindsey Waterways Strategy.

Objective 28: Establish a close working relationship with Lincoln City Council to link with the implementation of the Lincoln Waterways Strategy.

Key Theme 2 – Extending the Network

The waterways network in Lincolnshire primarily focuses on the Fosdyke and Witham from Torksey to Boston, the Welland and Glen, and the Ancholme. There are a number of opportunities to extend the existing network through restoration of a number of former navigations. Map 1 shows the locations of potential extensions to the waterways network.

Louth Canal

The Louth Canal from Louth to Tetney Lock is twelve miles long and six - seven miles is owned by the Environment Agency. Restoration to navigation is being promoted by the Louth Navigation Trust, who have recently renovated the Navigation Warehouse at Riverhead in Louth. The Canal is not connected to the national network, but runs into the sea. With its proximity to the Humber and other ports and marinas on the coast there are opportunities to encourage sea going boats inland to Louth. The restoration of the Canal will need to link with other initiatives on the coast such as the proposed Coastal Strategy, an eco-tourism project by East Midlands Development Agency and the Heritage Coast Initiative.

Water resources is a key issue here with a large abstraction to Covenham Reservoir to provide a water supply for Grimsby. Also water is transferred from the Great Eau to the Louth Canal by Anglian Water in drought conditions. A Partnership is to be formed to develop a feasibility study for restoration. It is anticipated that the study will cost £35 k and take nine months to complete. It will identify the principal difficulties, means and sequences of work, benefits of restoration, environmental impacts and an estimate of cost. The current estimate for restoration is around £9 m.

Key issues to be addressed are as follows:

- Navigation responsibilities
- Water resources are limited and reduced flows may lead to algal blooms
- Water resource impacts of climate change
- Environmental impacts of any water transfers, with respect to water quality, fauna and flora
- Flood risk
- Water Quality – water is used for drinking water supply
- Diversion of Conoco pipeline at seaward end
- Barrel sided locks – these unique structures are listed
- Bridge heights
- Towpath – is there a need for more signposting and milestones, or for new circular routes

Lincolnshire Waterways Development Framework

- Cycle and horse riding routes linking Louth to the Coast
- Two pubs, two possible reinstatements
- Birdwatching at Covenham
- Wetland projects – Louth and Thoresby Bridge
- Habitat diversity and landscape character reduced – provision of landscape features, restore wetland habitats and create buffer zones
- Tetney RSPB reserve (SSSI) at the seaward end – part of the Humber Flats, Marshes and Coast Special Protection Area (SPA). May require an appropriate assessment under the Habitats Regulations. Concerns over disturbance and dredging
- Saline intrusion
- Honeypots at Riverhead, Tetney Lock and Alvingham
- Boat facilities at Tetney – sheltered moorings
- Heritage Coast Initiative – maritime trail to link with Hull Marina and Bridlington
- Commercial freight – could be opportunities eg sugar beet
- Link to Market Towns Healthcheck for Louth
- Link to arts trails/facilities in Louth
- Education links to Grimsby College – the Marketing Department are helping to create a strong brand image

Objective 29: Prepare a feasibility study for the restoration of the Louth Canal from Louth to the sea, taking into account water resources and environmental issues.

Objective 30: Carry out a review of the towpath and linking routes to develop and implement proposals to promote the Louth Canal as a facility for walking, cycling and horse riding.

Horncastle Canal

The Horncastle Canal was eleven miles in length and went from Horncastle to the River Witham at Tattershall. There were two arms at the Horncastle end and two entrances from the Witham at Dogdyke and Gibsons Cut. The Horncastle and Tattershall-Coningsby Heritage (HATCH) Group has been established to promote the restoration of the canal to navigation.

The principal issue to be overcome is that of water resources. There is currently thought to be insufficient water in the summer months to support navigation. Measures such as

storage and backpumping would need to be considered to make water resources less of an issue. It may be possible to utilise information collected as part of the Bain Flood Alleviation Scheme to identify opportunities to augment summer flow.

Water resources will form a key aspect of the proposed feasibility study. This study has been estimated at £26.7 k with a large amount of in kind support from the Environment Agency, using data from its recent flood defence studies. The objectives for the project are to enhance aesthetic and wildlife value; improve informal recreation for local populations; and develop the tourism potential of the area, its associated employment and revenue. It is planned to approach the study in two stages, a study of water requirements and a study on canal restoration.

Key issues to be addressed are as follows:

- Navigation responsibilities
- Water resources - insufficient water for navigation, storage, backpumping
- Water resource impacts of climate change
- Environmental impacts of any water transfers, with respect to water quality, fauna and flora
- Reservoirs downstream of Horncastle to augment summer flows
- Flood defence
- Water quality
- Conservation.
- Restoration of eleven locks
- Bridge heights
- Kirkby on Bain to Redmile Bridge – old route to be reinstated
- Connection to the Witham could be a problem
- Cycleways, walkways
- Link to the existing Hull to Harwich Cycleway
- Link to extensive rights of way network, including the Viking Way
- Footpath Dogdyke to Coningsby
- Link to small County Council countryside site at Tattershall
- Links to the small marina and moorings on the Witham
- Link to the Spa Trail
- Gravel pits at Tattershall are a Country Club – successful but untapped
- Potential for a marina at Tattershall
- Visitor facilities at Horncastle – Scope for development as the District Council owns the field at the head of navigation

- Landfill Tax funding is a possibility. WREN are interested in the implementation phase
- Coningsby/Tattershall – Links to Village Appraisal and Business Plan
- Market towns – Horncastle has expressed an interest in the Healthcheck process

Objective 31: Prepare a feasibility study for the restoration of the Horncastle Canal from Horncastle to the River Witham, taking into account water resources and environmental issues.

Objective 32: Carry out a review of the towpath and linking routes to develop and implement proposals to promote the Horncastle Canal as a facility for walking, cycling and horse riding.

Sleaford Navigation

The Sleaford Navigation extends for 13 miles, linking Sleaford with the River Witham at Chapel Hill. The Sleaford Navigation Trust are promoting the restoration of the Navigation and have reopened the bottom 8 miles from Cobblers Lock to the River Witham. Navigation is generally possible in the summer months although there are problems at times with water levels and a low bridge.

The River Slea, or the Kyme Eau as the bottom section is known, are sometimes supported in the summer months by pumping from a borehole. At present, augmentation provides amenity flows through the centre of Sleaford for aesthetic purposes only. During dry years there is leakage through the river bed. There are major concerns over the availability of water between Sleaford and Haverholme in the summer months that will require detailed investigation before restoration can be considered. Restoration is proposed at this stage from Cobblers Lock to Haverholme. At Haverholme there is already a well-used visitor facility that can act as an end point for the navigation whilst further restoration is considered. Restoration to this point and enhancement of the visitor facilities will form a major focal point for the waterways.

In Sleaford, considerable work has been undertaken to regenerate the Navigation Wharf. It is proposed to create a major contemporary arts facility called 'the Hub' and develop the former Navigation House as a visitor facility. The river down to Cogglesford Lock has potential to be used by small boats provided that a slipway is installed in Sleaford. Restoration of Cogglesford Lock and the adjacent mill will also provide an important visitor facility.

Considerable feasibility work has already been undertaken. The principal studies needed now are a Water Resources Study and a Conservation Plan. The latter would be prepared for a proposed Heritage Lottery Fund application by the Navigation Trust. Two of the key objectives are to describe and evaluate the significance of all the environmental and

heritage assets of the Sleaford Navigation and provide a strong conservation framework within which the impact of the proposed restoration works can be assessed.

Key issues to be addressed are as follows:

- Navigation responsibilities
- Insufficient water for navigation – storage, backpumpin
- Water resource impacts of climate change
- Environmental impacts of any water transfers, with respect to water quality, fauna and flora
- Feasibility study in 1994 (LCC/C Comm) - £4 m for top five miles, including hard lining
- ADAS study on heights of floodbanks, weirs etc
- Halcrow study on top ponds funded by Sleaford Pride SRB - £400 k (top lock £250 k) – needs lifting bridge and bank work
- Ecological study – base for environmental assessment – spined loach, grey wagtails, water voles are important
- Land ownership is a key issue
- Flood defence – freeboard of only 225 mm for 10 year event
- Water quality
- Conservation
- Leakage problem in places
- Bridge heights
- Existing eight miles – water level and a low bridge can be a problem
- Rights of way
- Towpath – several gaps
- Cycle route – replacement of existing stiles to be considered
- Possible boat hire business in Chapel Hill area
- Haverholme - £300 k contract figure including raising banks. NKDC owned, fishing lakes ½ mile, priory etc
- Sleaford – development of The Hub, Navigation House
- Sleaford Water Weekend – considering slipway for small boats up to 20 ft - £17 k – need a definite site
- Cogglesford Lock restoration estimated at £240 k
- Marina ideas – Sleaford, Haverholme
- Kyme Tower – possible tourism link

Objective 33: *Carry out a water resources study to assess the feasibility of restoration of the Slea Navigation from Sleaford to Haverholme.*

Objective 34: *Prepare a Conservation Plan for the Sleaford Navigation to identify the significant natural and built features to be considered in developing the waterway for navigation and recreation.*

Objective 35: *Restore the Sleaford Navigation from Cobblers Lock to Haverholme Lock and develop Haverholme as a visitor facility and end point for the Navigation.*

Objective 36: *Restore Cogglesford Lock and provide a new slipway facility in Sleaford.*

Objective 37: *Carry out a review of the towpath and linking routes to develop and implement proposals to promote the Sleaford Navigation as a facility for walking, cycling and horse riding.*

Bourne Eau

There is potential to restore three miles of navigation from the River Glen to Bourne, linking with the proposed major wetland project at Thurlby Fen and the Car Dyke. The development of the fenland link project could bring forward this restoration. A lead organisation will need to be identified.

Objective 38: *Investigate the feasibility of restoring the Bourne Eau from the River Glen to Bourne to bring tourism benefits to the town and to link with the proposed Thurlby Fen wetland site and the Car Dyke.*

Grantham Canal

The Grantham Canal extends from Nottingham to Grantham, a distance of 33 miles, of which six miles are in Lincolnshire. Of these six miles 4½ are currently usable. The long term aim is to extend the Canal to its historic end in Grantham, but the main obstacle is the crossing of the A1, which does not allow navigation. This could be overcome if alterations to the crossing were incorporated into widening work on the A1.

The Grantham Canal Strategy has been developed by British Waterways to guide management of the Canal. It identifies a number of key actions that could be taken

forward as part of the Lincolnshire Waterways Partnership. Restoration to navigation is dependent on funding being available and environmental, particularly wildlife, impacts being addressed. Restoration of the Grantham Canal could act as a case study for the other restoration schemes proposed in Lincolnshire.

There are opportunities along the canal for further developing walking, cycling and bridleway routes.

Objective 39: Work with the Grantham Canal Partnership to assist in the implementation of the Grantham Canal Strategy and Action Plan.

River Ancholme

The navigation authority for the River Ancholme is the Environment Agency. The river is currently navigable to Harlam Hill Lock, which has recently been restored. The Environment Agency intend to dredge the river to extend navigation to Bishopbridge. Here, a winding hole can be developed and facilities can be provided at the Bell public house.

There has been a lot of conservation and access work along the Ancholme. North Lincolnshire Council Environment Team have undertaken a million pound project to benefit leisure activities along the Ancholme and dredging downstream of Harlam Hill Lock. There is scope to further develop facilities on the Lincolnshire section of the river and to develop a partnership with North Lincolnshire Council. Proposals include walks from Brandy Wharf to Bishopbridge, a café at Harlam Hill Lock and habitat improvements in association with flood defence works.

There is a long term proposal for an Ancholme/Rase link to connect the river to Market Rasen, but no one is pursuing this at present.

The Ancholme forms a key part of the Humber Strategy and there are a number of ongoing projects on the section of the Ancholme in North Lincolnshire, which is outside the county. Brigg is a pilot town for the Market Towns Initiative and there is a proposal for a marina there. These proposals form part of the plans of the North Lincolnshire Strategic Partnership. The 'Friends of County Bridge' group are working on an HLF bid. Proposals are being developed for river trips, rowing and canoe clubs. Interpretation opportunities are being progressed for a number of interesting structures, including South Ferriby Lock and seven listed bridges. The suspension bridge at Hawkstow is of particular interest.

Objective 40: Extend navigation on the River Ancholme to Bishopbridge and develop a winding hole and visitor facilities at the Bell public house.

Objective 41: Identify and develop improved visitor facilities along the River Ancholme.

Hobhole Drain

There is a long term proposal to restore East Fen Lock on the Cowbridge Drain near Boston to connect the Hobhole Drain to the national network. The disused channel has developed as a reedbed and this will need to be fully considered in deciding whether to proceed. The high quality angling and wildlife value of the Hobhole Drain are other major considerations and this would be likely to lead to some opposition to restoration. To justify the reopening of the Hobhole Drain, and make it an attractive proposition, new facilities would need to be provided. There is a possibility of building a lock into the River Steeping and link through to Wainfleet and Skegness. This would open up the waterways to a much larger holiday market on the coast. This is not on the current IWAAC list of restoration projects and is not currently being promoted by local groups.

Objective 42: Consider the benefits and disbenefits of reconnecting the Hobhole Drain to the national network.

Objective 43: Investigate the feasibility of linking the Witham Navigable Drains to the River Steeping and linking to Wainfleet and Skegness.

Stamford Canal

There is a long term proposal in the recent Inland Waterways Amenity Advisory Council (IWAAC) report, 'A Second Waterway Age', to extend navigation from Market Deeping to Stamford. This is not proposed within the timescale of this Framework.

Witham - Ancholme Link

There is a long term proposal in the above IWAAC report to develop this major new link. This is not proposed within the timescale of this Framework.

Grantham – Sleaford Link

There is a long term proposal in the above IWAAC report to develop this major new link. This is not proposed within the timescale of this Framework.

Key Theme 3 – Developing Regional Links

Lincolnshire cannot be looked at in isolation. There are several major projects being undertaken in neighbouring areas. The potential of the Lincolnshire waterways can be maximised by fitting into and building on some of these major initiatives. The major regional initiatives are summarised below. Map 2 shows how the Lincolnshire waterways link to the wider waterways network.

Nene and Ouse link

The proposal by the Environment Agency to link the Witham with the Fens and beyond has been one of the main drivers for the development of this framework. This project will link the Witham at Boston to the Nene near Peterborough, via the South Forty Foot Drain and the rivers Welland and Glen, which are currently isolated from the rest of the Fens inland waterways. The link will then be extended to join the Nene and Middle Level navigations to the Great Ouse. British Waterways are actively promoting the creation of a new canal link between the Ouse and the Grand Union Canal (Bedford to Milton Keynes Link). The initial target for opening this link is 2010.

The Environment Agency is leading on the South Forty Foot Drain and Car Dyke proposals and is working in association with Fens Tourism and local authorities. Initial feasibility work was promising and funding is now being sought for a full feasibility study to consider a technical assessment of engineering issues, a full environmental impact assessment and a cost benefit analysis. The study will include opportunities for conservation and access improvements along the corridor of the South Forty Foot Drain and the Car Dyke. An Objective 2 bid has been made and is awaiting a decision, and some funding will be available through the two Regional Development Agencies covering the area. The cost of the study is likely to be in the region of £200 k.

It is hoped to get a decision shortly with a view to making a start in September 2002. There is a lot of local support, but more work is needed to sell the idea to local communities. Implementation costs for the whole of the link are likely to be £25 m between Boston and Peterborough. Principal works needed are the rebuilding of the entrance lock at Boston, a new lock and short cut around Black Hole Drove Pumping Station, rebuilding the road bridge at Guthram Gowt and re-creating a lock connection to the Glen.

The project will provide a regeneration corridor, encourage land diversification and form a key link to the national network. For such a major project tourism cannot be the driver alone and major projects need to be identified to contribute to economic development in Lincolnshire.

Objective 44: *Support the Environment Agency in its proposal to develop the South Forty Foot Drain as a navigable waterway and establish a link through to Peterborough.*

Objective 45: *Identify and implement habitat, landscape and access improvements in association with the Nene – Welland - Witham link.*

East Midlands and Yorkshire

There are a number of links that can be made to other waterways and waterways initiatives to the north and west of the county. The River Ancholme links in with the Humber and the waterways of East Yorkshire and the River Trent links to the Chesterfield Canal and the Stainforth and Keadby Canal. There is a particular opportunity to build links between the Fossdyke and the Chesterfield Canal to develop an improved hire boat market.

Links should also be developed with some of the major wetland habitat improvement projects taking place on the Nottinghamshire side of the River Trent. These projects include the Beckingham Estates Project between Gainsborough and Newark and the 'On Trent Initiative' along the whole of the Trent. To the north, as part of the Humber Estuary Management Strategy, the Environment Agency are developing a major area of wetlands at Alkborough on the tidal Trent.

Objective 46: *Consider joint marketing initiatives with the Lower Trent and the Chesterfield Canal to encourage more use of the Fossdyke by hire boats.*

Objective 47: *Establish links with the major habitat creation projects taking place on the River Trent and consider undertaking similar works on the Lincolnshire bank of the Trent.*

Coastal Strategy

The Lincolnshire Coast is an area with very high nature conservation value in places, and major holiday resorts. It has been proposed that a Coastal Strategy is developed in parallel with the Lincolnshire Waterways Development Framework. It is essential that the two documents work together and that the many issues they have in common are fully addressed. Key links to the coastal study to include the Haven at Boston, Boston Washbanks (including the RSPB reserve at Freiston Shore), the River Steeping and the Louth Canal. Coastal visitors clearly provide a potential market for increased use of the waterways.

The Countryside Agency are taking the lead through the establishment of a Coast Forum, which will address issues such as tourism, access and protection. Lincolnshire County Council are likely to play a major role. The East Midlands Development Agency are already seeking ways to promote green tourism on the Coast and hope to make a link to the waterways.

Objective 48: Work with Lincolnshire County Council, the Countryside Agency and the East Midlands Development Agency to co-ordinate the aims of the Waterways Development Framework with those of the proposed Coastal Strategy.

Nottingham Waterside

Nottingham Waterside Ltd are carrying out a major regeneration project along the River Trent in Nottingham. This includes the development of a 'Trent River Park' extending from Gunthorpe to Barton-in-Fabis. A Masterplan has been developed for a 100 ha riverside area, which includes regeneration and development, enhanced access and environmental improvements. It aims to reconnect Nottingham to the Trent. Ten 'water activity nodes' are initially proposed, improved walking and cycle links. Such a high profile initiative will draw attention to the waterways and it is proposed that links will be made to encourage people to go from Nottingham to visit the waterways of Lincolnshire. A direct link to Lincolnshire is available through the Grantham Canal, which currently has a cycleway from Nottingham to Grantham. Linking rail services make a round trip feasible. The future possible restoration to navigation will provide another major link. The Lincolnshire Waterways Partnership can work on joint projects at a regional scale.

Objective 49: Work with the Nottingham Waterside Ltd to develop joint projects relating to the Grantham Canal and opportunities for joint information and interpretation provision.

Regional Transport

In encouraging a sustainable approach to tourism development in the county, it is essential to consider how visitors can come to the Lincolnshire waterways by means other than the private car. Initiatives such as bus and rail tours and packages and rail and cycle breaks could be considered, for example.

Objective 50: Investigate opportunities to work with rail and bus operators to develop timetables and tourism packages which encourage tourist use of the waterways.

Key Theme 4 – Developing Recreational Use of the Network

Cycling

The sustainable transport charity Sustrans are co-ordinating the development of a number of cycle routes in Lincolnshire, as part of the National Cycle Network. Many of the routes being developed follow waterway corridors, providing an opportunity to link in new visitor facilities for cycling as well as wheelchair and boating users, walkers and horse-riders. Links between the waterways and the National Cycle Network are shown on Map 3.

The 'interim' Hull to Harwich Cycle Route was the first part of the National Cycle Network to be opened and it forms part of the North Sea Cycle Route. It forms a strategic link between several waterways, including the River Witham, the Sleaford Navigation and the River Welland and runs close to the Horncastle Canal.

It is proposed to re-route the Lincoln to Boston section along much of the disused railway alongside the River Witham. An existing traffic-free path already runs from Lincoln to Washingborough, which attracts 100,000 users a year. With the high level of local support, it is proposed to extend this traffic-free railway path to Bardney and Kirkstead, using the existing railway viaduct over the river at Bardney Lock. Quiet lanes would then provide the continuity to Langrick Bridge, where a new section of traffic-free path would follow the River Witham to the existing multi-user route between Anton's Gowt and Boston. As part of the proposed Lincoln Eastern Bypass, it is hoped that a further new crossing near Lincoln can be secured. There is an opportunity to develop waterway-related interpretation facilities along the route. Art works are proposed along the route with an initial evaluation art study already underway.

Sustrans are also developing National Route 12 linking Crowland to Fosdyke Bridge and Boston, following the River Welland. It will mostly be on existing track, but some new infrastructure will be required, including a safe crossing of the A17 at Fosdyke Bridge. This route will supply the missing link between Crowland and the 'Peterborough Green Wheel' cycle network.

The local authorities of Lincolnshire are currently developing a number of strategic cycle routes which follow the county's waterways, providing an opportunity for linked tourism facilities.

A Greenways and Quiet Roads Network has been developed for the Greater Lincoln area as part of a national demonstration project. This allows many opportunities for circular routes to be developed fanning out from nodal points along the waterways, reaching unspoilt parts of the Lincolnshire countryside. A Greenways and Quiet Roads Strategy was published in September 2001. Projects relating to the waterways include the extension to the Lincoln to Washingborough path and a further extension to the existing route on the west side of the city to Burton Waters. The latter is to be extended to Saxilby and then it is hoped to extend it to Torksey, across the Torksey Viaduct and on to Clumber Park in Nottinghamshire. Within Lincoln City, Brayford Pool is being used as a focus for

cycle routes, with further work required to safely link cycle routes across the City Centre. It is proposed to develop a cycle link to North Hykeham along the non-navigable section of the River Witham.

A lot of work has been done on cycle routes in the South Kesteven District. A cycleway has been established along the Grantham Canal from Grantham to Nottingham. It is proposed to link the end of the Grantham Canal to the growing cycle facilities in the town centre. As part of the National Cycle Network, a route is being developed from Grantham to Sleaford, to link to the Hull to Harwich route along the River Witham. This would link together the Grantham Canal and the Sleaford Navigation and provide a through route from Nottingham to Boston.

A number of local authorities in the county already promote local circular cycle routes. There is huge scope in Lincolnshire for developing short circular cycle routes to link the waterways with nearby tourist attractions. This could be a major selling point for waterways based holidays in the county. The table below suggests a number of areas where circular routes could be promoted. Each one would start at a railway station to encourage visitors to arrive by train for a day's cycle ride. The areas of search for these routes are shown on Map 4.

Potential Circular Cycle Routes starting from railway stations, linking waterways to other tourist attractions

- Cleethorpes – Louth Canal – Louth – Wolds – Cleethorpes
- Market Rasen – Bishopbridge – Brandy Wharf – Wolds – Willingham Woods – Market Rasen
- Gainsborough – River Trent – Torksey – Gainsborough
- Lincoln – Fosdyke – Burton Waters - Whisby Nature Park – Hartsholme – Lincoln
- Lincoln – Limewoods - Abbeys – Woodhall Spa – River Witham – Lincoln
- Grantham – Grantham Canal – Belvoir Castle – Grantham
- Heckington – Sleaford – Sleaford Navigation – Car Dyke – Tattershall – Horncastle Canal – River Witham – South Forty Foot Drain – Heckington
- Boston – River Witham – Tattershall – Windmills – Hobhole Drain – Boston
- Peterborough – Crowland – River Welland – Spalding – River Glen – Market Deeping – Peterborough

Objective 51: Develop the Lincoln to Boston section of the Hull to Harwich Cycle Route along the disused railway line adjacent to the River Witham.

Objective 52: *Develop the proposed cycle route from Lincoln to Saxilby and investigate extending it to Torksey.*

Objective 53: *Develop the proposed cycle route from Lincoln City Centre to North Hykeham along the River Witham.*

Objective 54: *Develop the Fosdyke to Crowland Cycle Route alongside the River Welland.*

Objective 55: *Develop a cycle route linking the Grantham Canal and the Sleaford Navigation to provide a through route from Nottingham to Boston along the waterways.*

Objective 56: *Develop and promote a number of circular cycle routes linking waterways with other tourist attractions and railway stations.*

Walking

Walking is a major leisure activity along the county's waterways. Access is generally provided through either permissive or definitive access. The County Council is shortly to develop a Local Access Forum, which will consider issues of open access land, common land and will develop a Rights of Way Improvement Plan. Waterway access should be a key issue to be considered by this Forum. There are opportunities to develop new access through the Countryside Stewardship Scheme. The Countryside Agency will be developing the Open Access Maps for Lincolnshire in early 2003 and these will need assessing in due course.

The Viking Way footpath forms a strategic link between some of the county's waterways. The route includes the Grantham Canal, River Witham and Horncastle Canal. There is an opportunity to develop interpretation facilities along the route. Map 5 shows the potential links between the waterways and the Viking Way.

The key market is likely to be for short country walks including stretches of waterway rather than long distance waterside walking routes. A network of circular walks could be developed linking to the waterways. Two examples already identified are linking the waterways with the Lincolnshire Limewoods in the Bardney area and a footpath link from the Fosdyke to Hartsholme via Swanpool and Bentham Mere Nature Reserve in Lincoln. There is scope for linking waterway walks to health as part of the Countryside Agency's 'Walking Way to Health' initiative.

In Lincoln City a pedestrian strategy is being developed linking to the waterways. Brayford Pool has been identified as the first area to study.

In Boston, the Boston Woods Project is being developed to provide a large area of woodland encircling the west side of Boston. It is hoped that this can incorporate access and habitat improvements that can link to the waterways in the area.

It is proposed that a Welland Way will be developed and the Environment Agency are keen to support its development.

Objective 57: *Identify and develop new walking routes alongside waterways through the creation of permissive or definitive paths or access through the Countryside Stewardship Scheme.*

Objective 58: *Use the proximity of the Viking Way to a number of watercourses as an opportunity to develop interpretation facilities and information leaflets.*

Objective 59: *Promote a number of circular footpath routes linking to the waterways and work with the Countryside Agency on the 'Walking Way to Health' initiative.*

Bird Watching

Bird watching is becoming a popular visitor attraction in Lincolnshire through the Gibraltar Point National Nature Reserve and the recently developed nature reserves at Freiston Shore and Frampton Marsh on the Wash. There is scope to develop improved facilities for bird watching on the Witham Navigable Drains to provide an alternative to the coastal sites.

Objective 60: *Identify opportunities on the Witham Navigable Drains to develop facilities for bird watching to build on the interest created by the Frampton Marsh and Freiston Shore RSPB reserves.*

Horse Riding

Current proposals for horse riding adjacent to waterways include a bridleway on the east side of the South Forty Foot Drain and a bridleway on the off side of the Grantham Canal. Further opportunities need to be identified and there is scope for equestrian-related facilities such as stabling and saddlery as well as riding school facilities.

The British Horse Society is keen to develop longer and circular riding routes in the county and to develop horse-related tourism opportunities. The waterways could be linked with the National Bridleroute Network, which consists of a National Network, Regional Routes and Community Circuits, and is also available to cyclists and walkers. The priority for Lincolnshire is to concentrate on Community Circuits.

Objective 61: Work with horse riding organisations to identify opportunities to develop bridleway access to the waterways, linking to the National Bridleroute Network, and developing associated equestrian facilities.

Boating

The Lincolnshire waterways are generally considered to be under-used for boating. Use is predominantly by privately owned boats for day cruises, day visits and cruising. There is a very small hire market, with one operator at West Stockwith, but these boats generally use the Chesterfield Canal rather than the Fosdyke. The tidal nature of the river restricts use of the Lower Trent, particularly by inexperienced boaters.

This Framework seeks to encourage increased boating on the Lincolnshire waterways and therefore improved facilities are needed. Visitor mooring on the Witham needs to be improved, and there is a particular problem in Boston from vandalism. The Fosdyke also lacks stopping points, although the provision of new visitor moorings at Burton Waters and improvement of the existing moorings at Saxilby will provide important facilities.

On the Lower Witham there is a major safety issue for boats during flood flows. The range in river levels can be 4-5 m, and as a consequence boats are removed at Boston and on the Kyme Eau in winter. Proposals need to be developed to protect Grand Sluice from damage by trees, drifting boats or other debris. Safe havens need to be developed adjacent to the river channel for boats to shelter from major flows.

Other facilities currently lacking in Lincolnshire are a dry dock facility and moorings and facilities suitable for disabled people. If boating is to be increased there will be a need for more marina facilities and there are possible developments at Gainsborough, Tattershall and Boston. Smaller facilities could be provided at Horncastle, Tetney Lock and Haverholme.

Use of the waterways for non-powered boating, such as canoeing and rowing is relatively low at present. There are existing rowing clubs at Boston and Gainsborough and Gainsborough Rowing Club has an opportunity to develop new club facilities. There is potential for more rowing and canoeing use of the River Welland at Stamford, in addition to punting.

The Environment Agency consider that the Rivers Welland and Glen are not currently fulfilling their recreation and navigation potential due to deficiencies such as slipways and moorings, and a lack of publicity. There is a potential marina facility at Fosdyke. The

Agency propose new slipways and access for disabled anglers. A study is proposed to assess the recreational demand and needs on the Welland.

Objective 62: *Identify opportunities for developing new marina facilities to increase boating use and establish safe havens on the River Witham.*

Objective 63: *Consider opportunities to develop rowing facilities at Gainsborough, Boston and Stamford.*

Objective 64: *Identify locations and develop new slipway and mooring facilities, and consider new marina facilities on the Rivers Welland and Glen to help to fulfil their recreation and navigation potential.*

Angling

The Fosdyke is an important location for angling, but the facilities available have scope to be better developed. Parking is an important issue as many anglers currently park along roads. The provision of small car parks along the Fosdyke would provide for anglers and other visitors. These should be developed adjacent to mooring facilities for boats and more formal fishing pegs. British Waterways would like around 250 pegs on the Fosdyke. Structures within 9 m of the watercourse would require Land Drainage consent from the Environment Agency.

Demand in the Witham and Trent for pleasure and match fishing has declined in recent years due to poor catches. Use is primarily by local anglers and there are only modest economic benefits. They do provide some business for caravan parks and pubs. Off line fishing ponds could be developed that would suit many competitors.

Boston and South Holland are key areas for specialist angling breaks, especially weekends, with very important facilities being provided by the Witham Navigable Drains and the Hobhole Drain in particular.

Objective 65: *Develop angling provision along the Fosdyke by increasing the number of pegs to 250 and developing small car parks for anglers and other users.*

Access for All

Any provision of access to the waterways needs to take into account the needs of all users, regardless of age, disability or ethnic background. This needs to be incorporated from the outset in planning the development of any facilities. There is considerable experience

around the country of applying this approach to town, countryside and waterway situations.

The Grantham Canal could provide an ideal case study. Development of the recreational infrastructure has been planned through the Grantham Canal Strategy and Action Plan. A funding bid to the Heritage Lottery is proposed for the non-restoration aspects of the Action Plan.

Towpaths

Towpath management needs to consider the needs of all users and the surface needs to be appropriate to its location. Sustainable access to the towpath should be encouraged wherever possible, particularly nearer centres of population. The provision of seats, information boards and small car parks would improve the visitor experience.

Local Transport

Links need to be established between the waterways and other modes of transport. This will include working with the Local Transport Partnership, which promotes buses, trains and road transport, but is short on water-borne activities at present. The Local Transport Partnership is able to invest in utility use, with additional funding through the County Council Highways and Planning Department. Funding may be available towards a feasibility study for a water bus on the Witham.

The East Midlands Development Agency (emda), through its Rural Action Plan seeks to promote sustainable tourism initiatives and recognises the tourist potential of the Region's waterways. Linking with other modes of transport is one of the key areas for regional funding.

Waterway Infrastructure

Facilities adjacent to the waterways are limited at present. There is a common perception that a number of the waterways are boring. This can be addressed by developing a series of nodes along the waterways where visitor facilities can be provided and where boats will be encouraged to stop. These will also provide increased access to the waterways for other users.

The Lower Witham, in particular is lacking in visitor facilities. A series of nodes could be developed to include facilities such as picnic areas, pubs, cafes, shops, barbecue areas, wildlife areas, information facilities and sanitary stations. The development of such facilities would raise the profile of the river as a tourist destination and would be likely to increase access to future funding opportunities.

Lock sites provide a major opportunity for these nodes. It has been suggested that the lock at Bardney could be improved by mechanisation and the lock access to the Witham Navigable Drains needs to be upgraded.

The Fossdyke has scope for a number of stopping points with improved access over the floodbanks to access facilities behind.

In Lincoln there are 20 residential moorings to the west of the Brayford Pool, which need to be better developed. There is scope to develop a community-based facility and watersports facilities, and improve landscaping, car access and security. It is hoped to engender more of a sense of ownership. New residential moorings could be developed elsewhere in the county.

The Brayford Pool at Lincoln provides major potential for waterway related development, linked to businesses around its perimeter. It is being promoted as the new Cultural Quarter for Lincoln. It is currently leased by the City Council to the Brayford Trust until 2006. Development is guided by a ten year strategy, which is now in year nine. There is scope to develop more visitor moorings in the Pool and to manage the waterspace to benefit the local environment. The University are proposing some more development on the waterfront, with the next block due for completion in September 2003. The Pool is the first priority in a Visitor Management Strategy for the City, which has Interreg funding. Other opportunities related to the Pool are establishing better links to the Burton Waters development, developing a Sculpture Trail and providing a major information facility on the history of Brayford Pool and the Lincolnshire waterways.

A public realm project, including paving, fencing and lighting, at the Glory Hole aims to connect Brayford to the City Centre.

At Gainsborough a major riverside development project is being implemented, including a riverside walk, new visitor moorings, conversion of warehousing to residential uses and the development of chandlery facilities. There are flow and silting problems which limit opportunities for on-line moorings on the river.

Torksey provides an opportunity to develop a visitor facility at the British Waterways site at Torksey Lock. This could include a heritage centre, visitor moorings, a café and toilet facilities. Links could be established with Torksey Viaduct and Torksey Castle, which reflect the history and archaeology of the area. Recreational cycling could be developed here to link with the proposed cycle route linking Lincoln and Clumber Park, and using the Torksey Viaduct.

At Boston, the Port of Boston are considering developing 16 berths for visiting yachts at Bath Gardens. This will coincide with the construction of a new river crossing. There is potential to link to the South Forty Foot Drain. There is also an opportunity to consider improved moorings on the Maud Foster Drain close to the centre of Boston.

Map 6 shows some of the possible development opportunities.

Objective 66: *Develop a series of nodes along the Lower Witham and Fosdyke, which provide a variety of visitor facilities for boaters and other users.*

Objective 67: *Review the management of the residential moorings at Lincoln, develop a community facility and improve landscaping, car access and security.*

Objective 68: *Work with Lincoln City Council and the Brayford Trust to develop a joint vision for the long term development and management of Brayford Pool.*

Objective 69: *Investigate opportunities to link Brayford Pool to the Burton Waters development through footpaths, bridleways, cycleways and river buses.*

Objective 70: *Consider the development of a major exhibition facility at Brayford Pool about the history of the Pool and the Lincolnshire waterways.*

Objective 71: *Work with the Port of Boston to develop visitor mooring facilities close to the town centre.*

Key Theme 5 – Promoting the Waterways

Marketing – Local, National and International

There are a number of tourism initiatives taking place in Lincolnshire and it is essential that the marketing of the waterways is co-ordinated with these initiatives.

Some of the most relevant initiatives are as follows:

- Taste of Lincolnshire
- Tourism Grant Scheme
- Marketing Campaign
- Church Tourism Cascade Project
- Aviation Heritage
- Lincolnshire Wolds

In West Lindsey there is scope to increase day visits to Gainsborough and the villages along the waterways through visitor attractions, interpretation, information, signing, visitor facilities and events.

Objective 72: Develop links with other tourism initiatives in the county to ensure opportunities are maximised to promote the waterways through marketing initiatives.

Branding of Lincolnshire Waterways

There is strong support in the county for developing a 'Lincolnshire Waterways' branding scheme. This would be used for signage, interpretation and information provision and would provide a clear link between the many projects proposed for the waterways in the county.

It will need to be co-ordinated with existing branding schemes, particularly the one used to promote the Fens and the 'Unlocking Lincolnshire' brand being used to promote economic development in the county. It will also need to take account of any differences in cultural identity in different parts of the county.

Objective 73: Develop a branding scheme for Lincolnshire waterways for use in signage, interpretation and information provision.

Use of Computer Technology

The Lincolnshire Waterways needs to develop a clear link to the Destination Management System (DMS), being developed by Lincolnshire Tourism, in association with all local authorities and industry members. It is proposed that funding will be £1 m from Lincolnshire County Council and £1 m from Objective 2. Waterways could be developed as a theme within the DMS.

Objective 74: Establish links with the proposed computer-based Destination Management System for the county and ensure the waterways are one of the key aspects to be promoted.

Gateway Sites

Many of the Lincolnshire waterways can be accessed by boat from outside the county or from the coast. The entry points into Lincolnshire can act as 'Gateways' to the Lincolnshire waterways. These should act as focal points, which provide visitor facilities and information about the Lincolnshire waterways network. The visitor should be aware that they have arrived in Lincolnshire and of what it has to offer.

Suitable sites for 'Gateways' include the following:

- Fossdyke at Torksey
- River Ancholme at Brandy Wharf
- Louth Canal at Tetney Lock
- River Witham at Boston
- River Welland at Stamford
- Grantham Canal at Woolsthorpe

These sites are shown on Map 6.

Objective 75: Develop a series of major interpretation facilities on key waterways to act as gateways to Lincolnshire.

Interpretation

In addition to the Gateways, there is scope for exhibition facilities related to the waterways. A network of facilities should be developed, which could include the following locations:

- Brayford Pool, Lincoln

- Navigation Warehouse, Louth
- Navigation House, Sleaford
- Guildhall, Boston
- Ayscoughfee Hall, Spalding

Further interpretation facilities should be provided throughout the network, with key interpretation sites being at the 'Honeypots' shown on Map 6.

Objective 76: *Develop a network of visitor and exhibition facilities, including facilities at Lincoln, Louth, Sleaford, Boston and Spalding.*

Objective 77: *Develop a programme of interpretation provision throughout the Lincolnshire waterways, and including major provision at 'Honeypot' sites.*

Signage

Naming of waterways by providing name signs on major road crossings can help to raise the profile of the waterways network. This has been done successfully in the Fens.

Objective 78: *Develop a programme of installing signs showing waterway names at major road crossings to raise awareness of the waterways.*

Public Art

Opportunities should be sought to develop public art in association with the waterways. There are some existing initiatives as follows:

- Arts Trail on the Trent
- Arts Trail in Lincoln
- Hull to Harwich Cycle Route
- Sleaford Navigation
- Louth Arts Trail

Objective 79: *Develop opportunities for waterway-related public arts projects.*

Events

There are already a number of events related to the waterways. These could be supported through the project and new opportunities could be developed.

Some of the former, existing or proposed events are as follows:

- Sleaford Water Weekend
- Lincoln River Festival
- West Stockwith Boat Club Endurance Race – Gainsborough to Boston
- Proposal for a Gainsborough Riverside Festival
- Head of River Race – Lincoln to Boston rowing race
- Boat rallies at Cowbridge
- Louth Navigation Annual Half Marathon

Objective 80: *Support a programme of major waterway-related events at venues throughout the county.*

Education

Organisations such as the Environment Agency and British Waterways already produce education packs relating to waterways. There is an opportunity to develop education materials specifically about the Lincolnshire waterways for use in Lincolnshire schools.

The location of the University of Lincoln at Brayford Pool provides a good opportunity for collaborative working.

Objective 81: *Develop a series of educational materials relating to the Lincolnshire waterways.*

Key Theme 6 – Business/Economic Development

Economic development at the regional (East Midlands) level is guided by the Integrated Regional Strategy and the Regional Economic Strategy.

The Development Framework helps to meet economic, social, environmental and spatial themes of the Integrated Regional Strategy.

It helps to meet the vision of the Regional Economic Strategy in helping to achieve a vibrant economy, healthy diverse and inclusive communities and a quality environment. It seeks to help to fulfil the values of the Economic Strategy as follows:

- Sustainable
- Quality and excellence
- People and learning
- Empowerment
- Partnerships at all levels
- Outward looking

Village Facilities

The Lincolnshire Waterways can play a key role in helping waterside villages to develop local facilities to serve the local community and visitors. This could include local small businesses, such as village shops, pubs, cafes, craft shops, community transport etc. Many leisure users, such as cyclists, walkers and horse riders stay locally and buy provisions as they travel, providing an additional steady income for small businesses. Funding and advice is available from the Countryside Agency through the Vital Villages programme, which is administered in Lincolnshire by the Community Council. Funding is available for the following:

- Parish Plans (up to £5 k)
- Community Services (£500 - £25 k, non-statutory, up to 75%)
- Parish Transport (up to £10 k to meet community needs)

The Agency also have a call off contract for retail consultants, who can provide a free visit for sole village shops to give advice and information.

The waterways present opportunities at places such as Saxilby and Bardney to develop new facilities which can serve the waterways. In order to co-ordinate a number of local initiatives, Lincolnshire Waterways needs to assist local communities in developing proposals. This could be done through the appointment of a project officer.

Objective 82: *Provide assistance to local communities to develop local community initiatives to improve local facilities through the Countryside Agency's Vital Villages programme.*

Market Towns

The Countryside Agency and the East Midlands Development Agency are working on initiatives to assist market towns. Lincolnshire has a number of such towns and many of them are linked to the waterways network. The Agency and emda have prioritised a number of Lincolnshire market towns for Market Towns Healthchecks. This is a process whereby the local community identify their own needs in terms of new facilities. The pilot towns are Spalding, Market Rasen and Louth in Lincolnshire, and Brigg on the River Ancholme in North Lincolnshire. East Lindsey District are putting in a bid to Objective 2 for market towns.

As with the Vital Villages programme, there is an opportunity to provide assistance in the Healthcheck process and to better access available funding.

Objective 83: *Provide assistance to local communities to undertake Market Towns Healthchecks and to improve local facilities through the Countryside Agency's Market Towns programme.*

Local Produce

Lincolnshire County Council is running a project entitled, 'Taste of Lincolnshire', which aims to promote local food and drink as an attraction for tourism. Wherever possible links should be made between waterways tourism projects and food and drink projects. One such example is being developed on the Grantham Canal. Other examples could be Farmers' Markets in locations adjacent to the waterways.

Objective 84: *Investigate opportunities to link the waterways with the promotion of local produce through projects such as the 'Taste of Lincolnshire' project and Farmers' Markets.*

Business Development

The East Midlands Development Agency (emda) is keen to support tourism development in the county. Their regional priorities for action are as follows:

- Learning and skills (training)
- Enterprise and innovation (small businesses)

- ICT revolution (Link to DMS)
- Climate for investment (Quality natural and built environment; public realm; diversification; sustainable rural tourism; strengthen cultural assets; alternatives to the private car)
- Sustainable communities (targeted regeneration programmes, urban renaissance in Lincoln)

Business development proposals related to the waterways could help to fulfil all these priorities. New facilities need to be developed in a planned and co-ordinated manner and there is a key role here for the Lincolnshire Waterways Partnership in guiding and supporting the development of new businesses.

Other advice is available through the Countryside Agency through initiatives such as 'The Pub is the Hub' and the Green Tourism Kit.

The Rural Action Zone in South Holland, administered by the County Council and South Holland District Council provides support for economic outputs, education, employment, hospitality and tourism. Links need to be made between the waterways and the Rural Action Zone.

In Lincoln City there are a number of major development sites along the river corridor, which fall within the 'Central Rail Corridor Strategy'. The aim is to provide a series of spatial zones, each with a different focus. These may provide opportunities for improvement of the infrastructure alongside the waterways in the City.

In the north of the county, links could be established with the Humberhead Levels Green Tourism Forum, which seeks to promote private and public businesses in the Humberhead Levels area.

There is a disused sugar beet factory site at Bardney, which provides a possible development opportunity adjacent to the River Witham.

The new rugby and athletics stadium development at Boston provides an opportunity for waterfront improvements along the South Forty Foot Drain.

Objective 85: Provide support for business development proposals, which add to the available tourism infrastructure and improve local environments.

Objective 86: Establish links with the South Holland Rural Action Zone and identify opportunities for collaborative working on rural regeneration issues.

Objective 87: Work with Lincoln City Council on the regeneration of the riverside area within the City and seek improvements to waterway infrastructure.

Objective 88: *Establish links with the Humberhead Levels Green Tourism Forum and identify opportunities for collaborative working on developing new waterway-related businesses.*

Farm Diversification and Rural Regeneration

The waterways and their associated land provide ideal opportunities for farm diversification and rural regeneration in the form of local tourist facilities, businesses and accommodation.

The East Midlands Development Agency has produced a regional Rural Action Plan, which suggests the following items for special attention:

- Link agriculture to the wider economy
- Encourage farm diversification
- Strengthening clusters of land-related industries
- Encourage a higher level of skills in the farm/food sector
- Support local branding and product development and marketing

The Department of the Environment, Food and Rural Affairs (DEFRA) run a number of schemes to assist with funding for farm diversification.

The Countryside Stewardship scheme provides funding for farm management practices which benefit the environment. Funding is targeted through a Targeting Statement, which outlines priorities for each of the Countryside Character Areas. Many of these targets include wetland and waterway related habitats.

The England Rural Development Programme is an integrated programme of measures and is made up of the Rural Enterprise Scheme, the Process and Marketing Grant, the Vocational Training Scheme and the Energy Crops Scheme.

The Rural Enterprise Scheme is the most relevant to the waterways as it provides assistance to projects which support the development of more sustainable, diversified and enterprising rural economies and communities, and help protect the rural environment. It seeks to help farm businesses adapt to changing market demands and business opportunities. Funding can provide basic services for the rural economy and population; renovation and development of villages and protection and conservation of the rural heritage; and encouragement for tourist and craft activities. The scheme would not normally fund projects with an economic return beyond three years.

All these funding schemes can be applied to the waterways, but are voluntary schemes. There is a need for greater promotion of the schemes to waterside landowners if the provision of new facilities is to be co-ordinated between adjacent landholdings. A mechanism needs to be established to provide advice to landowners on diversification

issues. It will be necessary to develop working relationships with DEFRA over the England Rural Development Plan and the Farming and Wildlife Advisory Group (FWAG), who provide an advisory service for Countryside Stewardship.

Objective 89: *Work in partnership with DEFRA and the East Midlands Development Agency to maximise opportunities for farm diversification through the England Rural Development Programme and the Rural Enterprise Scheme.*

Objective 90: *Work in partnership with the Farming and Wildlife Advisory Group in developing opportunities for waterside habitat and access improvements through the Countryside Stewardship Scheme.*

Freight

The Lincolnshire waterways do not provide major opportunities for the transport of freight. The main opportunities are on the Lower Trent at Gainsborough and at the Port of Boston.

There is currently some use made of the Lower Trent for freight, such as the movement of gravel. Use is constrained to some extent by bridges, such as Keadby. Freight use is likely to need to be subsidised. Associated British Ports are the navigation authority downstream of Gainsborough Bridge.

The Port of Boston is used by sea borne shipping and the County Council are investing in it as a commercial port to serve the whole county. There is a current proposal to alter the lock gates to take 5 m beam vessels. A feasibility study for this is costing £350 k and Boston Borough Council (£4 m) and Lincolnshire County Council (£10 m) are proposing to pay for the implementation. It is intended to increase the amount of time that the docks can be used, improve vehicular access and promote the services of the dock. The dock will form part of an economic corridor, with a new road link to bring traffic into the port and to support local businesses. There is also some scope for boat use to move stone in the Boston area.

Objective 91: *Work with local industry to identify opportunities for increasing freight use on the Lower Trent and on the Witham at Boston.*

Key Theme 7 – Engaging with Local Communities

Consultation with Landowners and Local Communities

For all the projects outlined in this Framework, detailed consultation will be required, particularly with landowners and local communities likely to be affected by any proposals. Mechanisms will need to be put in place as part of the project management process to address key issues. Landowners, for example, are likely to be particularly concerned about impacts on land drainage or abstraction licences.

Wherever possible the project should seek to engage in discussions with interested parties at the earliest possible stage in the planning process. The emphasis should, wherever possible be on active participation.

Objective 92: *Ensure full consultation with landowners and local communities likely to be affected by any development proposals.*

Social Inclusion

Social inclusion is an issue that needs to be considered throughout the planning and implementation of waterways-related projects. Projects should seek to involve local people wherever possible, and should involve people of different ages and abilities, different needs and different social backgrounds.

Encouraging active pursuits such as walking and cycling can provide an important link to health issues and the benefits such outdoor exercise can have for the whole population.

Access for All

All projects should consider the needs of disabled people at the planning and implementation stages. Consultation with representatives of the likely user groups would help to better target the facilities provided.

Community Workshops

The first Lincolnshire Waterways Workshop was held in December 2001 to allow local organisations the opportunity to identify issues for inclusion in this Framework. The second Workshop in March 2002 helped with the process of prioritising issues for inclusion in the Action Plan. Similar workshops should be considered, either for the overall project or for some of the key actions identified.

Objective 93: *Consider the use of Community Workshops at the planning stage of local projects.*

Local Infrastructure Projects

The local authorities and statutory agencies will not be able to deliver all the actions needed to implement this Framework. Local communities will be encouraged to undertake projects in their local area and to seek funding from external sources. A network of these smaller projects will combine to provide major benefits to the waterways network.

Local communities could undertake projects to develop new areas of greenspace or to manage key aspects of the local heritage. The latter could include particular features or customs typical of that location. Funding for these projects is available to local communities through the Countryside Agency's 'Doorstep Greens' initiative and the 'Local Heritage Initiative'.

There is likely to be a need for some help and advice and this could be provided by the Lincolnshire Waterways project.

Objective 94: *Work with local communities to identify and develop opportunities for environmental enhancements through the Countryside Agency's 'Doorstep Greens' initiative and the 'Local Heritage Initiative'.*

Developing Local Skills

Many of the projects will be suitable for voluntary work by local communities and they will have an opportunity to learn new skills. There could be opportunities for more structured training through voluntary organisations or agricultural colleges, for example.

Community Strategies

Each of the District Councils are required to develop a Community Strategy to address the economic, social and environmental well-being of their area. This provides the local vision, guides the provision of Council services, and will, if the recent Planning Green Paper comes into effect, be supported by a Local Development Framework to address the land use aspects. The Development Framework for the waterways needs to link into each of these local visions. The County Council will play a co-ordinating role for these strategies, but will not produce one itself.

Objective 95: *Work closely with all local authorities in the county to ensure that waterways issues are incorporated into their Community Strategies and subsequently Local Development Frameworks.*

Key Theme 8 – Developing the Partnership

Management and Control

The Lincolnshire Waterways Partnership is currently an informal arrangement to provide funding for the production of this Development Framework. In order to take this forward, a more formal partnership is needed, with each organisation signing up to the Development Framework and its accompanying Action Plan. The Partnership will then be in a better position to bid for external funding.

Objective 96: Establish a formal Lincolnshire Waterways Partnership to lead and co-ordinate works related to the county's waterways.

Project Management Process

The key to implementation of this framework is that no one organisation or individual will organise all the work. It is anticipated that each of the partner organisations will identify which aspects they can take forward to seek funding and implement. There will also be a key role for community groups, such as Parish Councils to take forward local projects in their area. All these projects can come under the umbrella of the Lincolnshire Waterways Partnership.

The Partnership will need to develop a clear project management process, which would include an organisational structure, project implementation and stakeholder involvement. A suggested process is included as Appendix 1 to this report.

Joint Promotion

The proposed branding scheme will help to co-ordinate joint promotion of the projects. An agreement will need to be reached by the Partnership concerning the use of corporate logos. The Fens Tourism Project has used a single logo rather than those of all the partner organisations and that has worked well. A similar agreement should be considered for the Lincolnshire Waterways.

Project Manager/Steering Group Structure

In order to implement the Action Plan, a streamlined structure needs to be put in place to co-ordinate the everyday management of the projects. This should take the form of a small Steering Group, selected from members of the Partnership, that would oversee the work being done.

The Steering Group would need to be supported by a Project Manager or a small project team who would be responsible for taking forward the Action Plan and establishing working relationships with key partners. The Project Manager would be responsible for linking to other key initiatives such as the proposed Coastal Strategy and the Fens and West Lindsey Waterways Strategies

Objective 97: Establish a Steering Group from some members of the wider Partnership to guide the day to day work of the project.

Objective 98: Appoint a full time Project Manager to co-ordinate projects relating to the waterways in association with partner organisations.

Developing the Action Plan

Following consultation on the draft Framework, a five-year Action Plan has been developed to identify more specific projects and responsibilities for implementation, which can then be used for funding bids. Seven separate projects have been identified with different organisations taking the lead. The second Lincolnshire Waterways Workshop in March 2002 agreed that the highest priority was the Lower Witham, including the Horncastle and Sleaford. The seven projects are as follows:

1. Lower Witham (Stamp End to Boston), Horncastle and Sleaford
2. The Link
3. Fosdyke
4. Louth Canal
5. River Ancholme
6. Grantham Canal
7. Marketing and Promotion

Projects from the Action Plan will be matched to funding sources and the relevant members of the Partnership will submit the necessary bids. Projects will need to be prioritised and the Action Plan approved by members of the Partnership.

Map 7 shows the proposed project areas.

Funding the Action Plan

Implementation of the Action Plan will require funding from a wide range of sources, both from within the Partnership and external bodies. In developing the Action Plan projects will be matched to potential sources of funding. An outline funding strategy may be required to co-ordinate funding bids and this would be developed by the Steering Group. The following are some of the possible funding sources:

Lincolnshire County Council – LCC have committed £9.7 m over ten years for the development of tourism on the waterways, with the expectation of finding match funding.

Objective 2 Measure 2.3 – Bids for this European fund must be in line with Regional Economic Strategy. Priorities are transport, linking public transport modes; product development, improving destinations; public/private links and links with other destinations (a key issue for regional agenda).

Single Pot – This is national Government funding which is allocated by emda to each sub-region. The environmental, tourism and rural regeneration strands are relevant to this project. Responsibility for allocating this funding is likely to pass to the Lincolnshire Development Partnership.

Lottery – Some elements of the Action Plan may be eligible for funding from the Regional Arts Lottery, the Heritage Lottery or the New Opportunities Fund. The Heritage Lottery Fund have received fewer bids for area based projects from the East Midlands than from any other region.

England Rural Development Programme – DEFRA funding is aimed at the local level and will be for local projects.

Private Sector – This is a relatively untapped source of funding. Examples could be gravel companies or Conoco, who may have an interest in projects relating to the Lincolnshire Coast

Countryside Agency – Allocate funding for sustainable tourism, sustainable transport, market towns, Vital Villages and the Local Heritage Initiative.

Welland Partnership – This is a sub-regional partnership covering South Kesteven

South Holland Rural Action Zone – This area has a successful Leader Plus bid and an Objective 2 bid in at the moment.

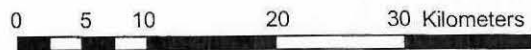
Leader Plus – This would apply in South Holland/Port of Boston, particularly for developing links to horticulture. There is an opportunity to influence the Business Plan.

Interreg IIIB North Sea Programme – This funds partnership projects related to spatial planning with other countries bordering on the North Sea.










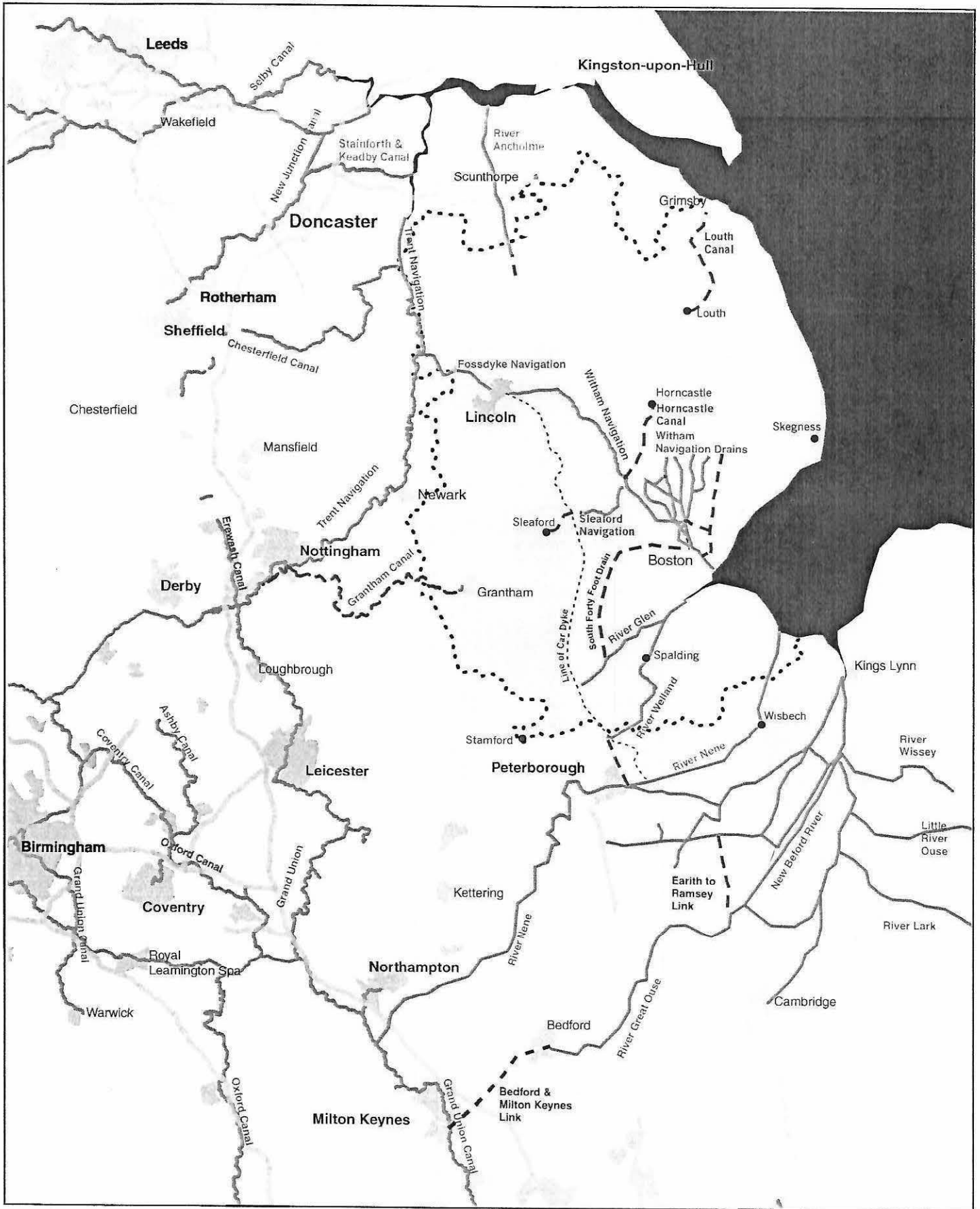
Lincolnshire Waterways

Map 1 - Waterways Map



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





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|---|---------------------------------|---|------------------------------|
|  | Navigable Waterway |  | Lincolnshire County Boundary |
|  | Potential Waterway Restorations |  | Urban Area |
|  | Proposed Canal Link |  | Town |
|  | Historic Waterway | | |

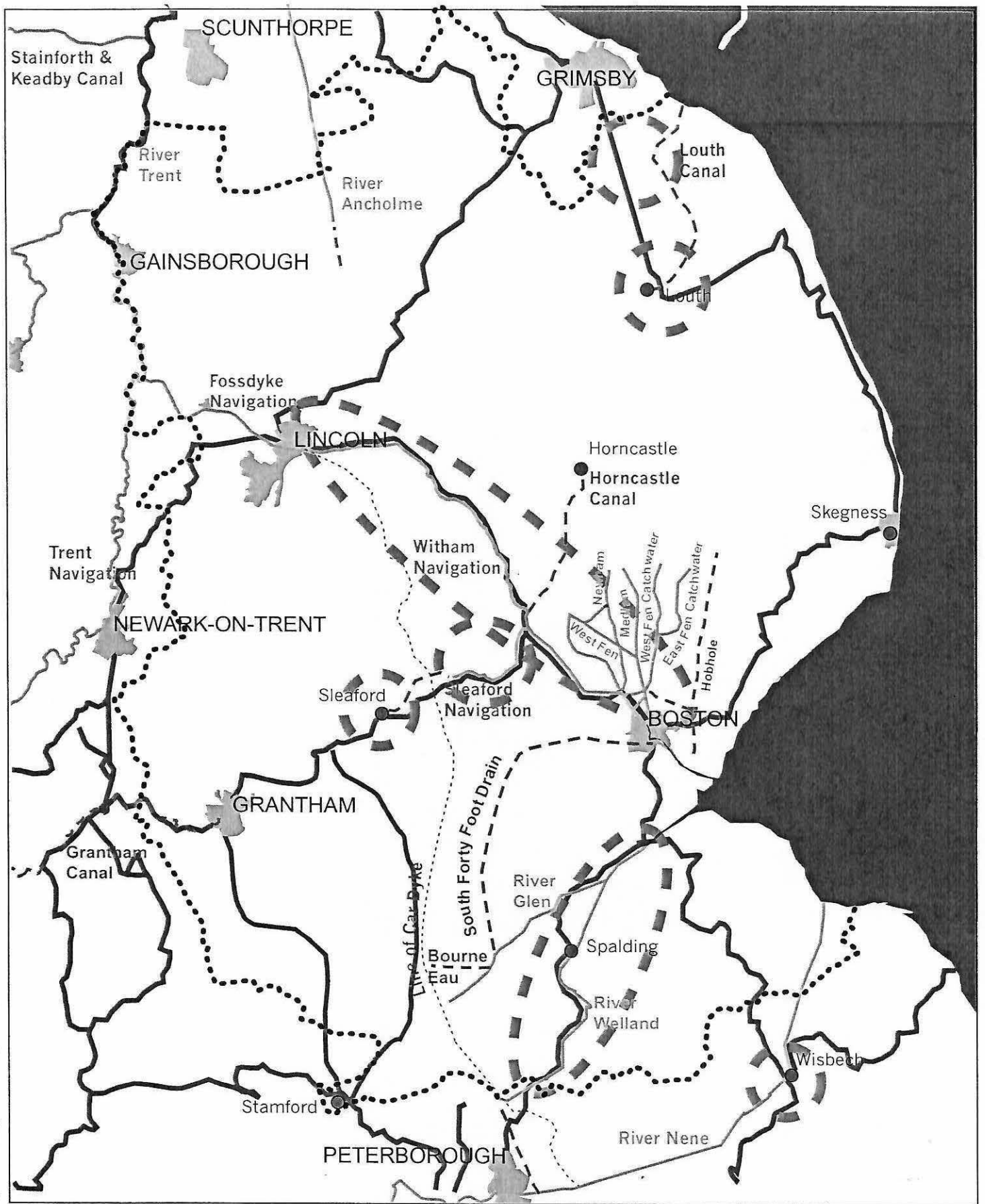


Lincolnshire Waterways

Map2 - Regional Context

0 5 10 20 30 40 Kilometers

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|---|---------------------------------|---|------------------------------|
|  | Navigable Waterway |  | Lincolnshire County Boundary |
|  | Potential Waterway Restorations |  | Urban Area |
|  | Proposed Canal Link |  | Town |
|  | Historic Waterway | | |



Lincolnshire Waterways

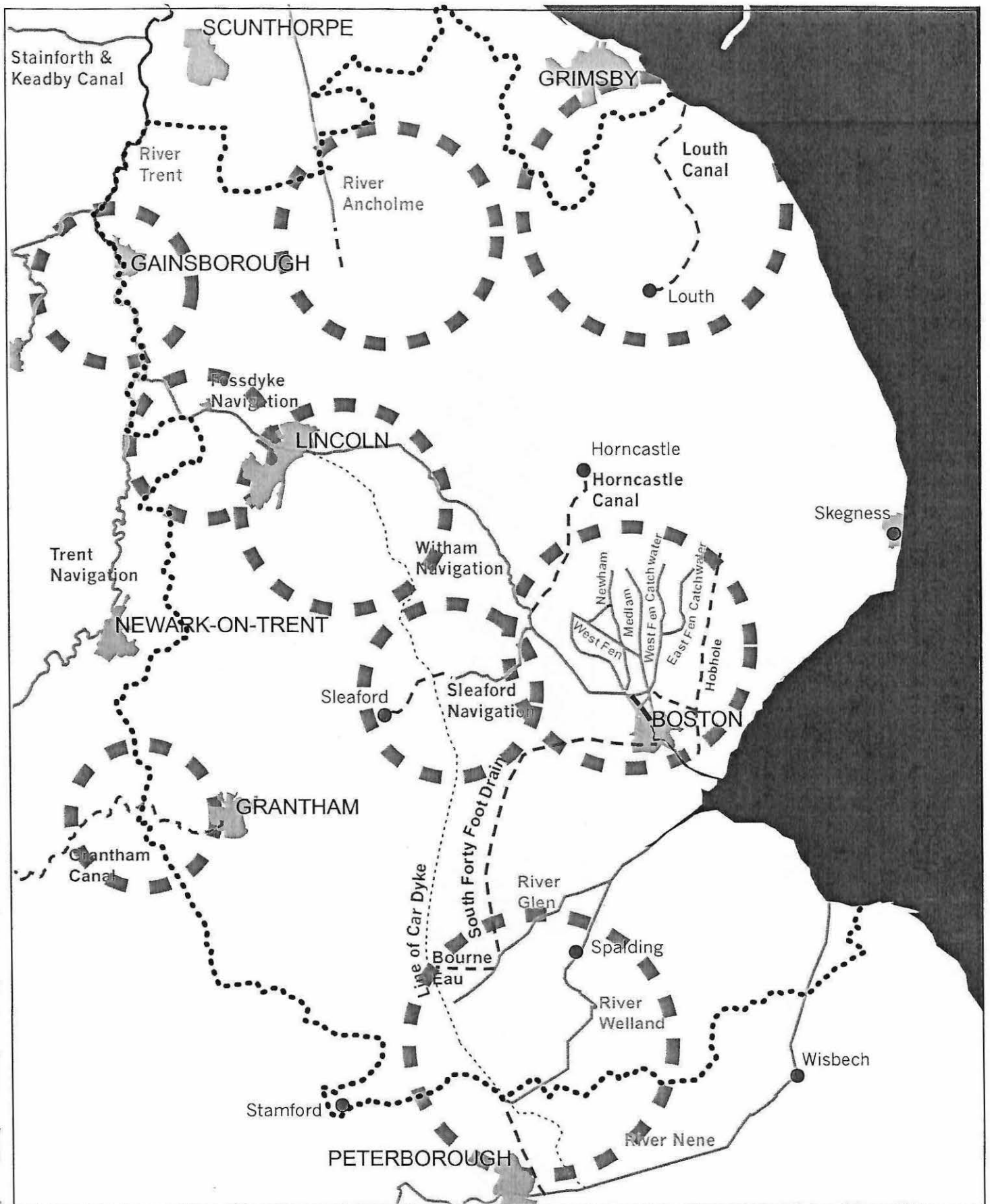
Map 3 - Links to the National Cycle Network and Regional routes

0 5 10 20 30 Kilometers



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|--|---------------------------------|--|-------------------------------|
| | Navigable Waterway | | Urban Area |
| | Potential Waterway Restorations | | Town |
| | Proposed Canal Link | | National Cycle Network routes |
| | Historic Waterway | | Regional routes |
| | Lincolnshire County Boundary | | Waterway links to NCN |







Lincolnshire Waterways

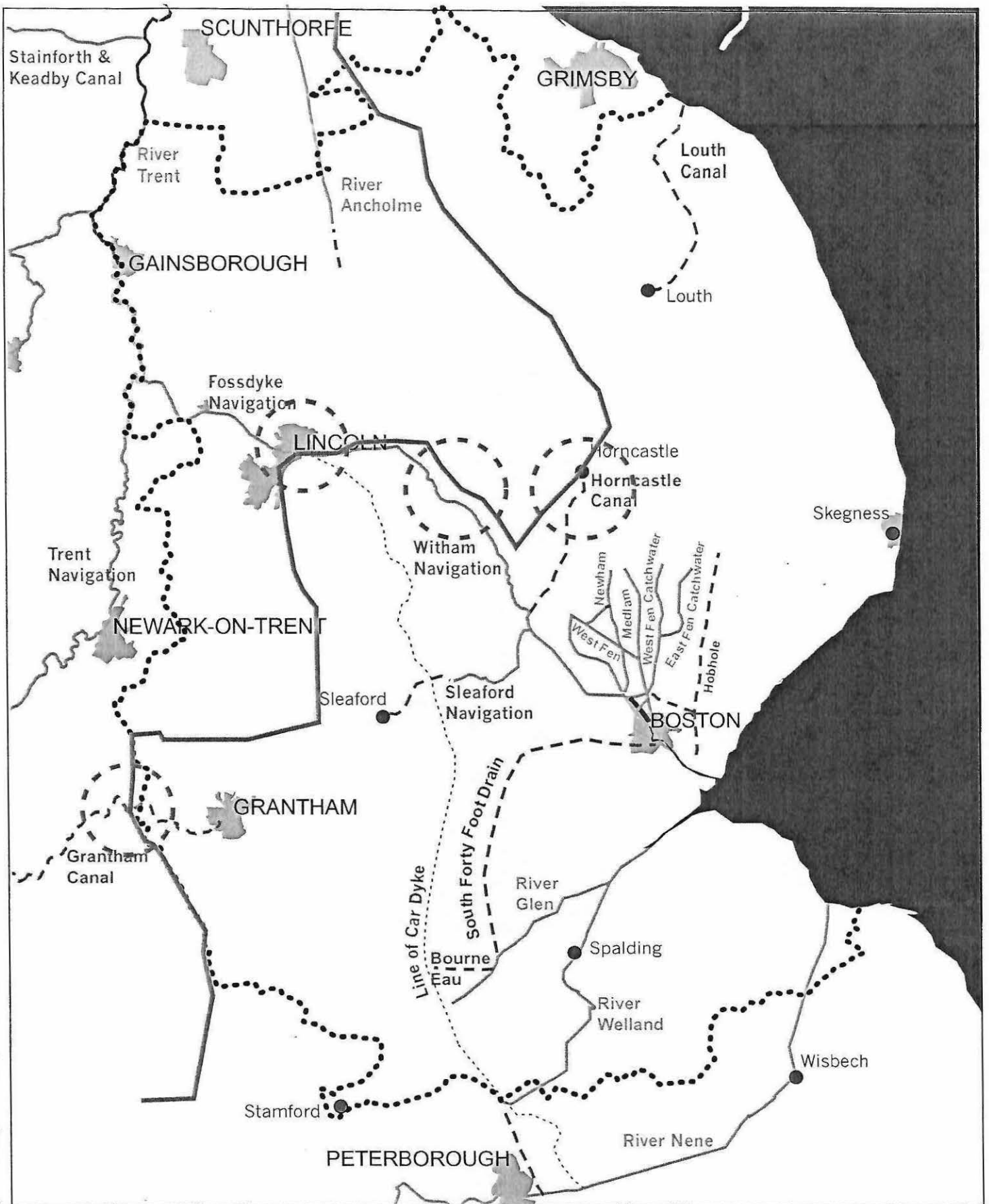
Map 4 - Areas of search for circular cycle routes

0 5 10 20 30 Kilometers

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-  Navigable Waterway
-  Potential Waterway Restorations
-  Proposed Canal Link
-  Historic Waterway

-  Lincolnshire County Boundary
-  Urban Area
-  Town
-  Areas of search for circular cycle routes












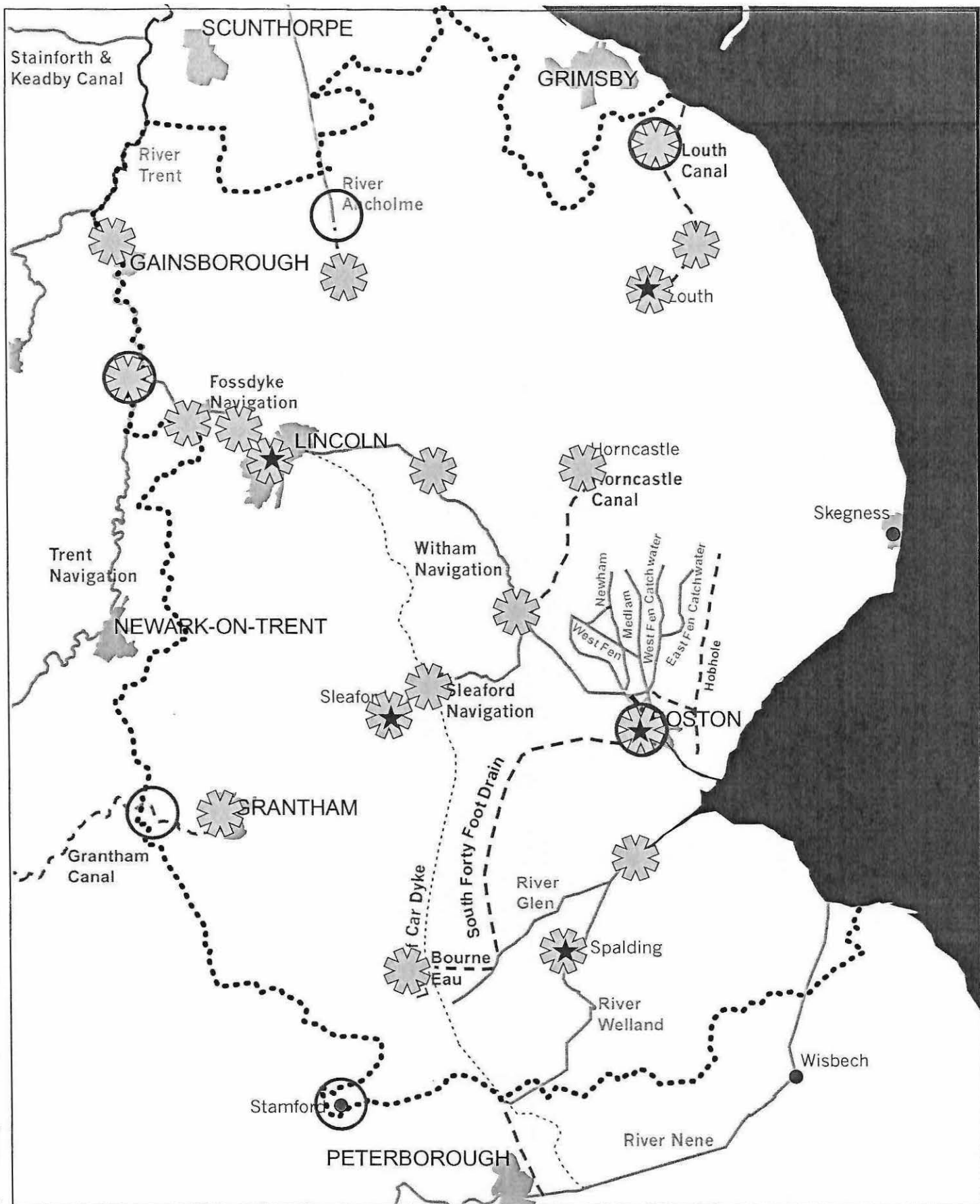
Lincolnshire Waterways

Map 5 - Links to the Viking Way Footpath

0 5 10 20 30 Kilometers

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|---|---------------------------------|---|---------------------|
|  | Navigable Waterway |  | Urban Area |
|  | Potential Waterway Restorations |  | Town |
|  | Proposed Canal Link |  | Viking Way Footpath |
|  | Historic Waterway |  | Waterway links |
|  | Lincolnshire County Boundary | | |













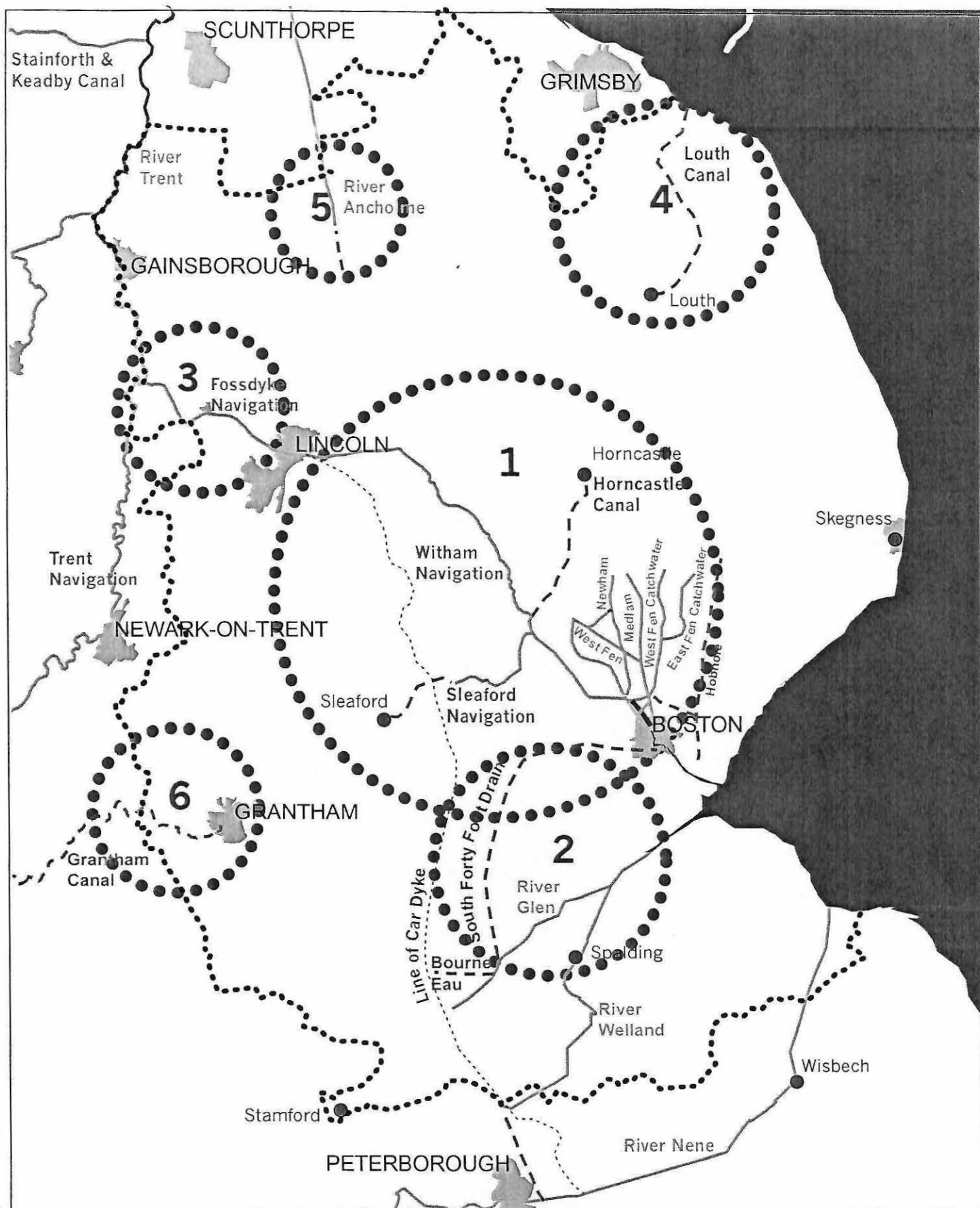
Lincolnshire Waterways

Map 6 - Development Opportunities

0 5 10 20 30 Kilometers

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|---|---------------------------------|---|--|
|  | Navigable Waterway |  | Urban Area |
|  | Potential Waterway Restorations |  | Town |
|  | Proposed Canal Link |  | Opportunity to develop waterway infrastructure |
|  | Historic Waterway |  | Gateway Sites |
|  | Lincolnshire County Boundary |  | Exhibition Facilities |



Lincolnshire Waterways

Map 7 - Project Areas for the Action Plan

0 5 10 20 30 Kilometers



- | | |
|--|---|
| <ul style="list-style-type: none"> 1 Lower Witham, Horncastle and Sleaford 2 The Link 3 Fossdyke 4 Louth Canal | <ul style="list-style-type: none"> 5 River Ancholme 6 Grantham Canal 7 Marketing and Promotion (whole County) |
|--|---|

