Mersey Estuary Management Plan Summary (MEMP)



An aerial view of the Mersey Estuary looking towards the Port of Liverpool and Liverpool Waterfront

Introduction

Mudflats and salt marshes, woodland, dunes, farmland and city waterfronts, all teeming with life. Animals, birds, plants, residents and tourists benefiting from a rich blend of habitats, water, leisure and business opportunities.

It hardly sounds like a typical description of the Mersey Estuary. Yet this natural harmony is closer to reality than most people imagine, thanks to the vision established in the Mersey Estuary Management Plan (MEMP). Now in its 11th year, the MEMP provides a framework for co-ordinated action among the local authorities and interest groups of the Mersey Estuary, which has made the area one of the cleanest developed estuaries in Europe.

It is not easy to get the balance right. But careful planning, forward thinking and cooperation help to ensure that the dynamics of the natural environment are respected and its quality assured – without hampering waterside regeneration and the growth of a maritime economy, tourism and recreation.

Estuary Dynamics

The tides, sweeping daily past Liverpool Pierhead, up the Estuary to Woolston and back again, make the Mersey Estuary a dynamic – and fragile – environment. The sediments deposited as sandbanks in the inner estuary constantly shift, and the main low water channel of the Mersey moves between the southern and northern shores.



The Silver Jubilee Bridge, Halton and the Inner Mersey Estuary and Manchester Ship Canal.

The physical effects of waves, wind, tides and currents are not the only forces at work in the estuary. Human activity modifies these natural processes and has a major impact on the landscape, habitats and natural dynamics of the area. The natural shoreline, for example, has been altered and land reclaimed in many areas for port and canal construction. This industrial activity means that navigation channels must be constantly dredged.

The estuary system has coped well with these dramatic interventions and so far the delicate balance of forces that ensures the overall stability of the zone has been maintained. But rising sea levels, and variations in the amount of sediment in the estuary, could quickly change this.

The MEMP recognises the interaction between natural estuary dynamics and human activity and acknowledges that their interdependence is highly complex. The plan, however, has a simple message: ensure that any human development or activity does not upset the natural processes in the area. It suggests some "best practice" in how to understand, manage and control /human influence in the area. Wherever a proposed activity (new development, harbour alterations etc.) may affect estuary dynamics, the MEMP insists that specialist studies should be undertaken to assess the likely impact, including the effect on natural coastal defences. The MEMP is closely coordinated with other shoreline management activities from the Upper Estuary and across the entire Liverpool Bay.

Such studies require baseline data. Since the MEMP's call for regular and comprehensive surveys of the estuary, a number of agencies including the Environment Agency and Natural England (formerly English Nature), have undertaken regular studies and monitoring of the estuary. These include monthly and periodical surveys of water quality and transportation of metals/nutrients, as well as annual sediment monitoring.

The planning for the New Mersey Crossing between Runcorn and Widnes demonstrates how the MEMP has been used: numerous studies and evaluations have been carried out to assess the impact of the crossing on everything from habitats and ecosystems, hydro- and sediment dynamics, air pollution and surface water quality, to cultural heritage and the economic development of the immediate and wider areas. Computer modelling has been used to predict the effects of the new bridge.

Water Quality and Pollution Control

The Mersey was once one of the most polluted rivers in Europe. With a catchment area that included areas of heavy industry and large towns and cities, the river picked up industrial effluent and sewage.

A combination of environmental legislation, regulation and local initiatives (e.g. work carried out by <u>United Utilities</u> – MEPAS, the <u>Environment Agency</u> and the <u>Mersey Basin Campaign</u>) have brought the Mersey back from the brink. Improvements in sewage treatment and reduction of effluent discharges have had a tremendous impact on the quality of the river's water: in 2001 salmon were observed at Woolston Weir in Warrington, and in 2002 oxygen levels that could support fish along the entire length of the estuary were witnessed for the first time since the Industrial revolution.

Continuing improvements in pollution control and the encouragement of environmental good practice are key objectives in the MEMP. Many organisations involved in the estuary zone have now adopted

Mersey Estuary Pollution Alleviation Scheme (MEPAS)

In 1981 North West Water (now United Utilities) and partners embarked on a programme to improve the water quality of the Mersey Estuary. A major problem was the discharge of raw sewage directly into the rivers and estuary. One of the first steps to alleviate this was the creation of an interceptor sewer (MEPAS) that runs from Crosby to Speke to divert approx. 28 raw sewage outlets to a new treatment works In Liverpool's Central Docks. Here wastewater is treated before being discharged.

Environmental Management Systems that ensure they follow the highest standards of pollution control. Moreover these partners have set joint pollution reduction targets.



A salmon captured by the Environment Agency as it makes its way up the river Mersey to spawn.

The <u>EU Water Framework Directive</u> now puts the emphasis on water management at the level of drainage basins. Thus the MEMP highlights the importance of coordination between all parties involved in the Mersey and its tributaries. Links between local river initiatives including The Mersey Basin Campaign's local action partnerships (<u>Action Mersey Estuary</u> and <u>Action Wirral Rivers</u>) are especially vital.

The MEMP highlights the key considerations for new development proposals, stressing that these should only be allowed where there is an adequate water supply and facilities for its treatment and disposal. Appropriate measures should also be taken to prevent groundwater pollution.

Unfortunately, many of the problems we suffer today stem from pollution in the past. The MEMP pushes for the treatment and remediation of contaminated land around the Estuary.

There are a number of new initiatives that look specifically at this and other aspects of regeneration including the <u>Mersey Waterfront Regional Park</u> and <u>Newlands</u> programmes, both of which are currently supported by <u>NWDA</u> (Northwest Regional development Agency).

Biodiversity

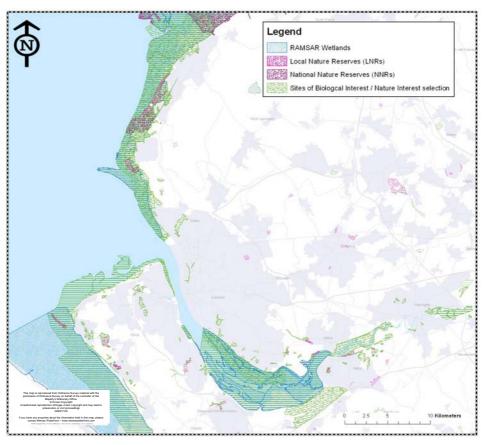
The Mersey Estuary (Warrington to Formby/Hoylake) provides a wide range of different habitats. Over the course of 122km of shore/coast one sees intertidal mudflats, rocky shores, salt marshes, beaches, dunes and areas of permanent water including docks. There are over twenty nature reserves along the estuary shore and sites of scientific interest including Altcar sand dunes and the North Wirral foreshore.

Indeed, a large section of the estuary (72km) has been designated a Ramsar Site (a wetland of international importance), an EU Special Protection Area and a Site of Special Scientific Interest. Since the MEMP was created progress has been made on establishing a Special Area of Conservation along the Sefton Coast.

The conservation and restoration of the estuary's rich biodiversity is essential, especially now that water quality is improving and the distribution and number of species in the area is on the increase.

The MEMP calls for the highest possible degree of protection to be given to these sites of international, national and local importance and offers examples of good management practice. Through carefully planned interventions, the estuarine environment may be restored to its former glory. Of course, this could mean the deterioration of habitats that have been established as a result of human activity.

Areas Designated for Nature Conservation within the MEMP/Mersey Waterfront area



Nevertheless, while the MEMP accepts that conservation of established habitats and species should be considered, it argues that this should not be done if it prevents the transition of the estuary to a more natural system, such as that seen in Halton where land previously used by the chemical industry has be decontaminated and restored to create Wigg Island Community LNR.

As suggested in the MEMP, a baseline survey was conducted in 2002 by Natural England to identify important habitats and sites for nature conservation. From this survey conservation work was planned and several important



A Red Squirrel at the National Trust Formby Point Refuge, Sefton.

targets were set, based on National Vegetation Classification surveys, salt marsh surveys and others. Natural England is due to undertake an inter-tidal habitat survey in the near future.

Sometimes, the protection of habitats (through environmental designations such as Special Protection Areas and Ramsar sites) is not enough, and specific measures have to be taken to ensure the protection of a species.

Examples include enforced protection of endangered species through

Integrated Coastal Zone Management (ICZM)

ICZM - The holistic approach to the management of coastal land and waters. Bringing together stakeholders (e.g. land owners and site users) to agree on appropriate and sustainable management. international law, or the creation of refuge areas such as those established in the north of England through the Red Squirrel Red Alert North England Programme.

Of course, conservation is not just for nature reserves and "official areas". The MEMP's outlook on biodiversity stresses the need for "creative conservation", whereby land management, redevelopment work and new building activities all give nature the best chance possible, for example by retaining woodland and trees, or incorporating wildlife habitats and corridors into development plans. For coastal processes this is practised through Integrated Coastal Zone Management (ICZM).

Land Use and Development

Sadly the natural features of parts of the estuary's shoreline are often missed by the casual observer; the buildings that rise from its banks can often dominate the landscape, bearing testimony to the area's industrial and maritime heritage. All along the water's edge are port and dock facilities, heavy and light industry and leisure facilities. The built environment contains magnificent examples of fine engineering and architecture, such as Liverpool's Mercantile City, which includes the Albert Dock, the Three Graces (the Liver Building, the Cunard Building and the Port of Liverpool Building) and other historical features, and was designated a World Heritage Site in 2004, as well as the

Manchester Ship Canal, the Silver Jubilee Bridge at Widnes or the Perch Rock lighthouse to name but a few.



Tall Ships sail down the Estuary past the 3 Graces to take part in the Mersey River Festival.

Government guidance to planning authorities stresses the importance of the coast and shoreline as a location for economic and social activity. Yet its special character – the blend of natural and historical landscapes and landmarks – must be preserved and protected.

This balance is achieved through careful stewardship, and the protection of landscape and townscape alike are central to the MEMP. New development is encouraged within existing built-up areas or as part of urban regeneration efforts, leaving the waterfront to retain its historical or natural qualities and heritage. The landscape of the open coast, which provides some relief from the urbanisation - important wildlife habitat and sea defences – must be further preserved or improved and opened up for informal recreation, such as walking.

The MEMP offers guidance to planners on how to assess townscapes and consider appropriate building projects. Restoration of the waterfront heritage is a primary concern, and old buildings and waterside features should be

preserved wherever possible, as has happened at Liverpool's Albert Dock. New developments, meanwhile, should be sympathetic to their surroundings and not detract from key views over the estuary – or from the estuary itself. Having surveyed the "townscape" of the zone, planning bodies now have access to consistent guidelines clarifying the size, scale and style of architecture in different locations along the shore.

Commercial Navigation and Port Development

The Mersey Estuary remains a central part of the Northwest's transportation infrastructure. Despite the decline in maritime trade, the prosperity of the area still relies on these water bodies. The Manchester Ship Canal, for example, remains an important navigation, transporting more than 8 million tonnes of cargo each year. It attracts industry and businesses along its 35 mile length. The estuary ports connect the Northwest to Ireland mainland Europe and the rest of the world, whilst road and rail link the ports with the rest of Britain. Indeed, cargo passing through the Port of Liverpool is at an all-time high and millions of pounds have been invested in new facilities and terminals, such as the Euro Rail freight terminal. New plans for taking post panamax ships will greatly increase the tonnage of freight through the port.

Post Panamax Ships

These are ships that are too large to travel through the locks on the Panama Canal.

Yet even as shipping and maritime activity picks up once again, especially in the leisure sector, the development and maintenance of port facilities and commercial navigation cannot be allowed to proceed unchecked. The MEMP highlights how the operation and development of ports can impact upon estuaries, their natural and physical resources and residents. In particular it emphasises the need for a systematic policy on the disposal of dredging spoil.

The MEMP also suggests that an Environmental Code of Practice should be established that will encourage estuary users to act responsibly and improve their environmental standards, for example by using environmental management systems. The Code would provide a standard methodology to assess the environmental impact of port expansion proposals (such as the new Liverpool cruise facility) through scientific research and consultations with local communities, councils and environmental bodies.

In essence, the MEMP recognises that continued port expansion is likely. Agencies must work together, plan ahead and ensure that the overall development of port activities – and the subsequent growth in related industries and employment – is coordinated.

Urban Regeneration

Regeneration is at the heart of the MEMP, which offers a framework by which the estuary's natural environment can be protected without hindering the area's economic growth. By supporting controlled, planned and coordinated regeneration, authorities can stimulate improvement that has environmental, social and economic benefits. Land and water are cleaned up; new, inspiring architecture attracts dynamic business. In other words, a healthy environment goes hand-in-hand with a healthy economy.

The MEMP identifies numerous regeneration opportunities within the built-up areas of the Estuary zone, from "flagship" schemes like Princes Dock to small rehabilitation projects. However, the MEMP stresses that authorities must decide on appropriate projects so that business, recreation, housing, tourism and heritage all have their place. It is important to select regeneration projects wisely to maximise the investment and protect the environment from negative impacts, such as increased traffic, or new forms of pollution. Authorities must also consider how they can help the benefits of regeneration spill out into other areas, for example, by encouraging chambers of commerce or the Learning and Skills Council in stimulating support businesses and services.

One major regeneration initiative targeted specifically at the Merseyside coastline/Mersey estuary and encompassing the MEMP area is the Mersey Waterfront Regional Park (MW). This initiative was borne out of the 2002 Action Plan for the City Region, in which it was one of two major ideas that would facilitate the step change in the sub-region's economic, social and environmental fortunes. The first phase (the Commencement Programme 2003-2007) is currently funded by the NWDA.

The concept is simple. Mersey Waterfront (MW) seeks to use the current and latent assets and opportunities around the Liverpool city region's waterfront to improve quality of life for residents, quality of visitor experience,

environmental quality, economic prosperity and the image and perception of the city region. The basic premise of this initiative is that the collective sum of the parts is considerably more compelling and powerful than the individual components.

Tourism

If the 19th and 20th centuries were about industry, then the early 21st century is about tourism. Today tourism is one of the world's major industries, and it is being used to help transform the fortunes of the North West.

In the Liverpool City Region work is being undertaken to promote Merseyside and its unique coastline. Initiatives include: England's Golf Coast – the promotion of Merseyside as a golfing venue, boasting seven Championship Golf Courses (two of which will host the Open Golf Championships in 2006 and 2008) - and The European Capital of Culture – Liverpool will celebrate this award with a year of cultural events in 2008 that will entice visitors from across the globe to visit the city and surrounding region.

There is little doubt that the Mersey Estuary has a tremendous potential for tourism, but it remains limited to a few locations. The main traditional tourist attractions at present are at Liverpool's Albert Dock, including the Beatles Experience, the Maritime Museum and the Tate gallery. Other attractions in the area include the Three Graces, the Mersey Ferries, Spaceport, the Birkenhead river frontage and classic seaside resorts such as Southport. Further upstream, Ellesmere Port, Widnes and Warrington also encourage visitors.

Diagram showing clusters of Visitor Attractions along the Mersey Waterfront



The MEMP recognises the importance of the existing attractions and tourist hotspots and suggests that further tourist developments should be encouraged in these areas as they are now on the tourist map. It is also desirable that links between all the tourist venues are established with "cross marketing" ventures so that tourists can see the wide spectrum of activities available within the area and be tempted to visit more than just the most famous sights.

As the Destination Management Organisations (Tourist Boards) for Merseyside and Cheshire respectively, <u>The Mersey Partnership</u> (TMP) and <u>Visit Cheshire and Chester</u> promote the area as a whole, through marketing and media campaigns and conferences etc. This work aims to promote the city region by creating world-class leisure and business opportunities, and establishing it as a destination for major events. MW is tackling this issue through the provision of signage and interpretation. Through a common branding strategy is it hoped that this will create a real sense of place and guide visitors along the waterfront.

Even those parts of the Estuary that currently have little to boast about still have potential; they could be opened up to greater informal and low impact tourism which is compatible with environmental and recreational policies. Many parts of the Estuary zone are excellent for bird watching and walking.



Visitors walking the Sefton Coastal Footpath

The dramatic natural and industrial scenery could also be linked together along interpretive trails. The Wirral North Shore has provided a ranger service for many years, and the MEMP calls for the service to be extended along the entire estuary shore (although nature conservation and safety issues will preclude access to certain areas). This is now evident in other areas such as Sefton where coast and countryside rangers are managing sites, helping visitors etc. and at Halton where a pilot waterfront maintenance team has acted as a point of information/contact for the general public.

An important related aim of the plan is to improve the tourist and visitor infrastructure along the shores. Improved signposting, path maintenance, and the agreement of access rights or rights of way (especially to fill in gaps in the footpath network), the provision of car parking and toilets, public transport links and refreshment facilities will all encourage more tourists who will act as ambassadors for the region as well as stimulate its economy. New accommodation – both budget

and luxury – is already helping to attract new visitors to the region – this is most evident in Liverpool, but also in areas such as Southport, Sefton and Wirral, where proposals have been drawn up for new hotels.

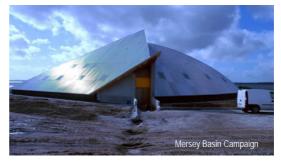
Water, always a focus for formal and informal recreation, is a great asset for tourist locations, and the estuary itself can also provide attractions. Special events such as the Tall Ships race bring large numbers of people to the coast, while more adventurous visitors may want to take to the waters themselves. Opportunities to moor and launch boats on the estuary are limited and the MEMP calls for these to be preserved and where possible augmented.

Recreation

Most people probably know the Northwest for its famous football clubs, but the area offers a much wider variety of

leisure activities. The Mersey Estuary's shores provide unrivalled opportunities for fresh air and open vistas, birdwatching and heritage trails. Footpaths criss -cross the landscape, following the shore and historic canals.

The water itself is a major attraction. Although the tides and currents make the estuary dangerous for inexperienced sailors, it is still popular with Merseyside watersports enthusiasts, including mariners of all kinds, anglers and wildfowlers. Without doubt, as the water gets cleaner, many more people are coming to the



The newly constructed Liverpool Sailing Club, Speke and Garston Coastal Reserve Liverpool

estuary for sport and recreation.

The MEMP aims to protect existing water based recreation and supports the development of new opportunities where appropriate. Since the plan was produced, a number of new watersports facilities have been proposed. Two such amenities which will cater for different groups include:

The Liverpool Sailing Club – a new clubhouse/community facility on the newly created Speke and Garston Coastal Reserve.

The Sefton WATER Centre – a facility which will be open to all ages and abilities, catering specifically for people with disabilities

The MEMP aims to make full use of these recreational opportunities within the wider context of the zone's managed development. For instance, public access to the estuary shore could certainly be improved, although the plan gives priority to low impact, informal activities such as walking or picnicking. Authorities have worked hard to provide a good infrastructure for informal recreation for instance by establishing and maintaining the Sefton Coastal Footpath and the Wirral Way coastal footpath. To encourage visitors and residents to enjoy the shore, the plan calls for all public rights of way, whether on the open coast or in built up areas, to be properly maintained and way marked. In addition, new routes need to be created to connect the riverside with inland paths and communities.

Of course, public safety must come first. Waterside routes may not be possible where the riverbanks are unstable or maritime and commercial operations make access difficult or hazardous. Many parts of the southern shore, for instance, are inaccessible, not least because the Manchester Ship Canal blocks access to the estuary edge.

MW is working with local authorities to find alternative routes around these potentially problematic areas where safety and security are key. One such section is the stretch where the operational Port of Liverpool makes access to the coast impossible. Here, plans are being drawn up to create footpath links with the Leeds and Liverpool Canal towpath, allowing the walker/cyclist to circumvent the port and then return to the waterfront on the other side.

Creating and maintaining footpaths, bridleways and cycle routes is only the beginning. Once established, people must be encouraged to use them. Investments in infrastructure, such as car parks, toilets and places to buy refreshments will also be necessary. Interpretive services, from educational sign -posting to ranger services should also be extended. Maintenance of these assets must also be considered from the outset. All these investments must be carefully planned and co-ordinated to avoid damage to the environment from overdevelopment.



Community members take part in a health walk around Speke and Garston Coastal Reserve to look at the changes made as part of the Speke and Garston Coastal Reserve project

As more and more people begin to make use of the leisure opportunities on the water and the shore, the authorities must remain vigilant. The plan notes that partners will have to carefully monitor visitor numbers and the impact of any increase. Likewise, they will have to reliably monitor the numbers and distribution of leisure craft using the estuary. Conflicts between users are likely to increase, and partners will have to get involved in resolving disputes, for example, by implementing measures to avoid congestion.

It is hoped that these measures will enable more people to enjoy the beauty and benefits of the estuary. But those who have already discovered its secrets need not worry about the influx of visitors: no development will conflict with other elements of the plan. The Estuary will remain calm and peaceful for all to enjoy.

How is it going?

The MEMP was the first ever document to attempt to provide a framework for the numerous activities that could potentially have an impact on the future and health of the Mersey Estuary. Since its publication in 1995, the MEMP has become an invaluable document for developers and those working to regenerate the estuary and Merseyside coastline. Its recommendations are being incorporated into policy and practice.

The annual Mersey Estuary Forum takes an overview of the regeneration and development taking place around the estuary ensuring that development fits with the aims of the MEMP.

Since the MEMP's inception the Mersey Estuary has undergone an amazing transformation. The land and water is cleaner and regeneration continues apace. Business investment and tourist expenditure increase each year.

The aims of the MEMP have never been more important. The Mersey Estuary is experiencing a new dawn, but those who have the power to guide its future must work together to ensure that its long-term interests are secure.