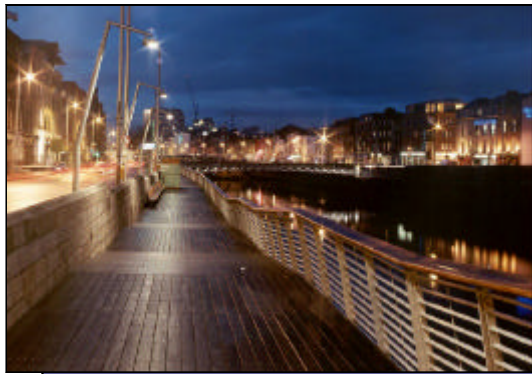




URBAN RIVER REGENERATION IN MANCHESTER

TRANSFORMING THE 'DARK RIVER IRWELL'



Urban River Regeneration in Manchester - Transforming the 'Dark River Irwell'

THE VISION

Following years of neglect by governments, commerce and the public alike, the importance of the River Irwell as valuable asset in Manchester, Salford and Trafford is becoming increasingly apparent. Its benefits in terms of its historical legacy as well as its huge potential to drive economic, social and environmental healing and growth are enormous. It is with this in mind that plans are now underway to turn the tide on the years of neglect and once again embrace the River Irwell as a fundamental part of the cities heritage and future economic and social growth.

A number of key stakeholders are involved in the development of this regeneration vision. These include Manchester, Salford and Trafford councils, Manchester Ship Canal Company, Environment Agency, Mersey Basin Campaign, local businesses, landowners, community groups and the wider Manchester, Salford and Trafford communities. It has been recognised as imperative to engage and consult all stakeholders through a continuous process of involvement, ensuring the regeneration vision compliments and builds upon strategies and local objectives combined with the needs of the local community.

The vision to create a linear, harmonised, vibrant and attractive waterfront involves:

- Boats, marinas and water based activities to reclaim the riverside heritage of the Irwell
- Integrating travel by water with the transport network
- Increasing waterside access and security
- Creating opportunities for tourism, leisure and recreation centred around the river
- Improving water quality for recreation and leisure use
- Enhancing terrestrial and aquatic ecology
- Using the river theme to unify buildings and developments

The vision is to reinvent the central Manchester conurbation as the major waterfront destination in Northern England.

The river has massive potential to bring about economic, social and environmental regeneration, focusing on its unique heritage and allowing it to be remembered for the spectacular industrial achievements. This regeneration initiative should provide a reason for people to return to the area and to act as a catalyst for further waterside regeneration within Manchester, Salford, Trafford and beyond. A unifying theme should be applied that incorporates this impressive heritage, transforming the link between Salford Quays and Trafford Wharf with Manchester City centre, and realising the vision to make this one of the most important and vibrant waterfronts in the UK.

THE RISE AND FALL OF THE RIVER IRWELL

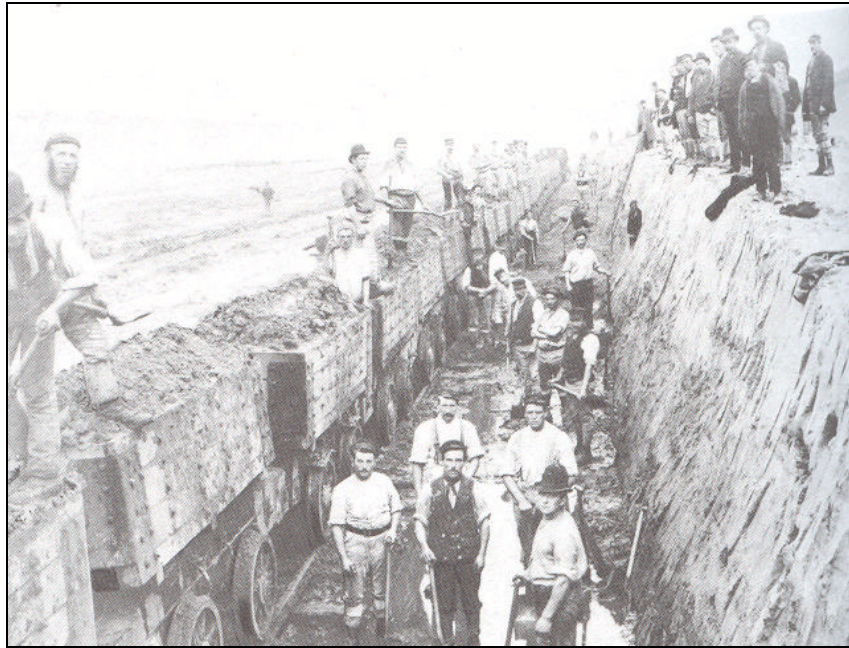
The early history of Manchester, Salford and Trafford is defined by rivers, with the River Irwell being the major river of the area. Manchester was already the commercial powerhouse of the Northwest long before the rise of the Industrial Revolution in the late 18th century. Great reliance for carriage of goods and raw materials was soon placed on river navigation. Sailing 'flats' were the first boats to reach Manchester from Liverpool. Being shallow draught boats, they could work on the Mersey estuary as well as on the rivers.



A painting looking downstream from Albert Bridge, New Bailey Street (1856) - the Manchester bank is on the left, with warehouses and river 'flats' moored alongside

In addition to trade in cotton, timber and grain there were regular passenger boats to Runcorn and Liverpool and by the 1830's pleasure boats on the Irwell to Pomona Gardens. By the middle of the 19th century however, the Mersey & Irwell Company was suffering badly as a result of competition from the railways and the Bridgewater Canal. There was a growing requirement for Manchester to be cheaper and more competitive, and the advantages of a deep wide waterway from Manchester to the sea were being voiced by the region's traders.

The building of the Manchester Ship Canal between 1885 and 1894 did much to revive the city's fortunes, bringing great economic benefits to the region. At the beginning of the 20th century, Manchester was held up to the rest of the world as the success story of the Industrial Revolution. Moreover, the Manchester Ship Canal brought new life to the River Irwell.

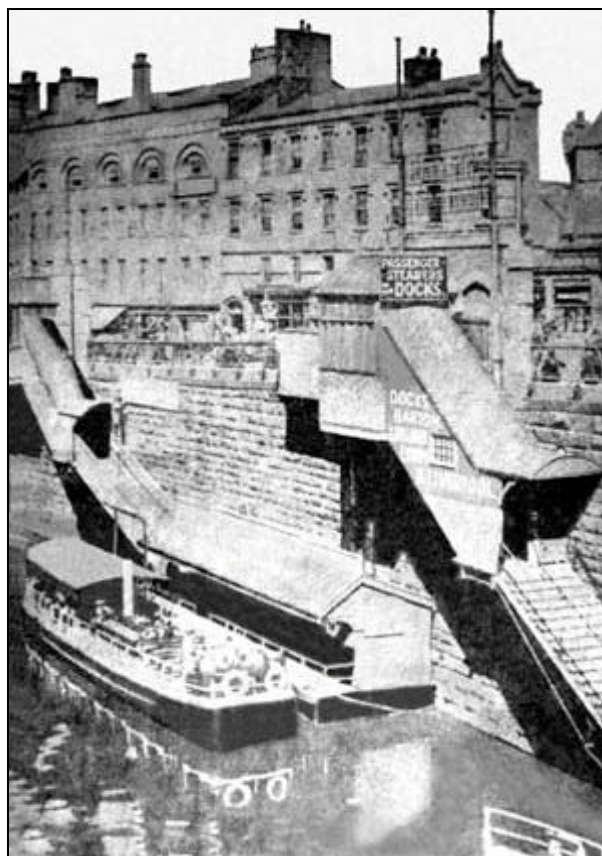


Excavating the Manchester Ship Canal (1885 and 1894) - an achievement since hailed as “a feat without precedent in modern history”

Indeed two steam packet offices were built opposite the Cathedral between Palatine and Victoria bridges, both offering sightseeing tours from landing stages on the River Irwell to the new Manchester Docks and along the canal to Barton, Irlam and Lymm. These landing stages were known as the ‘Cathedral Steps’. Being intensely rival companies, they provided their own flights of stairs down to the floating landing stages moored in the Irwell. Principally because of problems with flooding however, the two companies only remained in business for a few years and they closed down in 1906.

DECLINE AND NEGLECT

River traffic in the river upstream of Pomona Docks gradually declined and subsequently the River Irwell and its heritage became neglected and its importance to the city began to be forgotten. However, the Manchester Docks at Salford prospered and became one of Britain's largest ports, reaching a peak in the 1950s. Nevertheless even the docks lost favour over the next decade due to a combination of containerisation, shifts in trade patterns and an increase in the size of ships. During the second half of the 20th century, the decline in industrial usage of waterways and docks resulted in boats departing from the waterways. Owing to their poor environmental quality, waterways such as the River Irwell were effectively abandoned, with buildings literally turning their backs to the river, which was allowed to deteriorate further.



A passenger steamer on the River Irwell adjacent to Manchester Cathedral (1894) – the steps were subsequently washed away in a flood in the late 1800s

REGENERATION AND RECLAMATION

Despite the decline in commercial shipping, the future has looked increasingly promising for the River Irwell in recent years, with water quality improving and regeneration of urban areas ever building in momentum. The enormous success of Salford Quays is testimony not only to the value placed by commerce and society on water front locations but is also testimony to the courage of those with imagination and energy to transform such a seemingly impossible vision into magnificent reality. The Irwell river corridor has the same potential to bring economic growth, social inclusion and environmental regeneration right into the heart of the city centre as well as radiating out into the surrounding areas. However, all sectors (public, private and voluntary) are required to work in partnership with common goals in order to achieve a well balanced and successful regeneration vision.



A contemporary image of Salford Quays – a success story in waterside regeneration

Considering that the past success and vibrancy of the Irwell was marked by the presence of people and boats of all kinds, it is essential that the reintroduction of water based activity of all kinds will be the way forward in realising the modern day potential of the Irwell. Through the encouragement of navigation along the waterway, various parts of the city would be linked into a linear, harmonised and attractive waterfront. In turn, businesses, housing, tourism and recreational activities would develop, which would bring further improvements, developments and regeneration initiatives as well as potential to the area.

In short, the building blocks for a major, international scale waterfront redevelopment are all around us. What is now required is the same vision and energy that made the Quays so successful to be applied to the Irwell corridor and allow the river to reclaim its rightful position at the heart of this great city.

THE FORGOTTEN RIVER TODAY

At present however, the river corridor continues to suffer from poor accessibility and poor visual amenity. Moreover navigation along the waterway is restricted, with the draught not sufficient in many parts to allow the movements of boats along the river. In addition to a sparse distribution of landing stages, waterborne access to the river is extremely limited. Currently there is just one access point, being the New Hulme Lock to the Bridgewater Canal.



Boat movement is restricted due to insufficient draught in some areas

The decline in industry and shipping combined with subsequent improvements in sewage treatment processes have led the way for important water quality improvements. However, much of the river corridor and its tributaries still suffer organic pollution problems. These areas are characterised by poor water quality and a stressed ecology. This limits the potential for recreational use in what is arguably a unique expanse of under-utilised water in the centre of the city.



Litter is a tremendous problem in the River Irwell and Manchester Ship Canal



Sediment rafts and surface scum in Pomona Docks



Fly-tipping under the historic St Georges Arches

Some historic structures have been abused and treated with contempt, such as the impressive St Georges Arches, which are subjected to illegal fly-tipping.

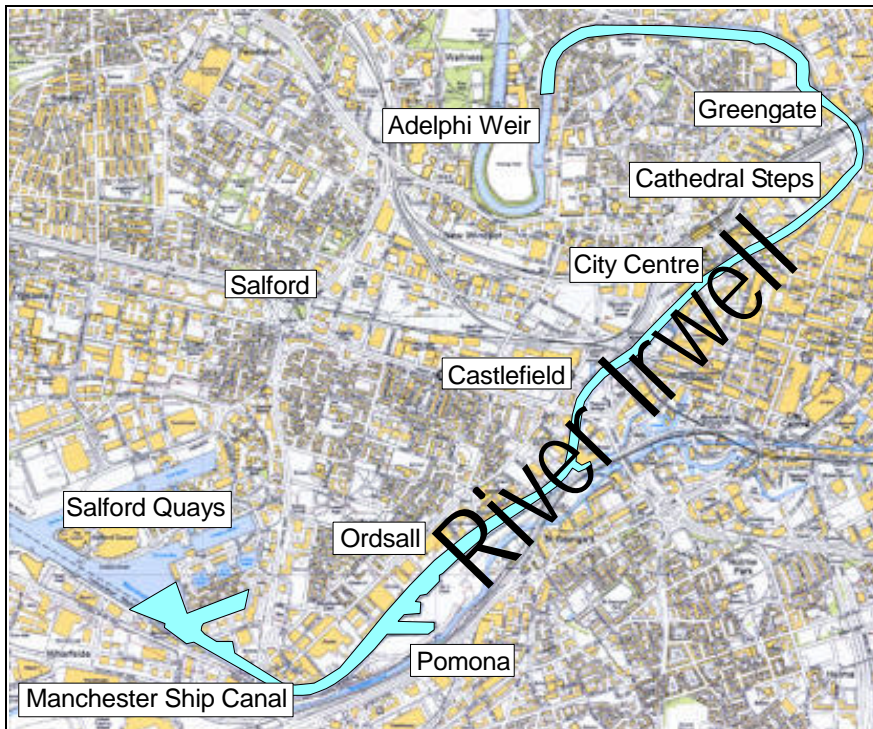
Additionally, access along the river banks is extremely limited in places and security is a serious issue in the areas which are accessible. Security for boat owners is also a serious issue severely limiting use of the area as a barge tourist destination.



Narrow and neglected pathways flank the River Irwell in many places

REDISCOVERING THE 'DARK RIVER'

Despite the problems outlined above, the River Irwell is a major landscape feature in its own right, penetrating through the historic heart of Manchester, Salford and Trafford. The river fosters massive potential to bring about social, environmental and economic regeneration, focusing around its unique industrial heritage. It is this notion of the river providing a link between the established landmarks and areas for which Manchester, Salford and Trafford are now famed, whilst capitalising on the bountiful historic features between Basin 6 at Salford Quays to Victoria Station in Manchester City centre that should be explored.



Map showing the River Irwell study area from Salford Quays to Victoria Station

AWAKENING THE POTENTIAL

The river corridor possesses tremendous aptitude to portray a variety of styles, with combinations of ultra-modern and heritage-embracing architecture combined with innovative and creative waterfront design.



Street lights reflecting on the water create exciting night scenes

Furthermore the Irwell river corridor has the potential to provide Manchester, Salford and Trafford with not only a revitalised and rejuvenated central area, but something that is distinct, presenting the area with its own unique identity. Whilst the intention is not to try to create a pristine ‘countryside’ style river, the aim of the project is to capitalise on the bountiful industrial heritage entwined within the waterway and to celebrate the origins of the city by embracing the Irwell’s potential once again.

The rebirth of the River Irwell is expected to subsequently act as a catalyst, as others have done before, for further waterside regeneration within the city of Manchester and westwards along the Manchester Ship Canal. In future years, Greater Manchester will be viewed as a major water based destination, with rivers and canals being a central identifying feature and one of the main attractions for commerce, leisure and recreation.



Innovative designs to overcome problems whilst retaining old features

Lessons from previous restoration schemes should be assimilated and fed into the regeneration of the Irwell river corridor to ensure that:

- The awareness of the community is continuously raised throughout the regeneration of the river corridor, for example through the implementation of a communications and involvement strategy or educational activities. The most sustainable improvements are the ones that have involved the community throughout.
- The watercourse is not treated as an ‘ornament’ but a living thoroughfare and that the environmental improvement is placed at the heart of the regeneration process.
- The regeneration process is socially inclusive, creating access for all, for example, the elderly, those with physical or mental illness, in addition to young people and those on lower incomes for whom watersides offer numerous low or minimal cost recreational activities.
- The regeneration of the waterway acts as a catalyst for inward investment that is sustainable.
- The regeneration of the corridor is built around a partnership involving all key stakeholders to ensure that a common goal or vision for the corridor is shared and delivered.

NAVIGATION

Not only will boating activity be catalytic in recreating the hustle and bustle once so characteristic of the Irwell corridor, the presence of marinas will also generate revenue. It is anticipated that the types of craft using the Irwell after development will be small pleasure craft, water taxis and commercial cruisers, in addition to rowing boats, canoes and even white water rafts and dragon boats. To achieve this goal, a combination of dredging, creating access from other waterways and strategic positioning of landing stages is required. Furthermore, significant bacteriological improvements will permit the pursuit of watersport activities, as seen in nearby Salford Quays.



Water taxi services could link into the existing transport network



Landing stages may be modern or re-creations of historic examples

Several sites along the river corridor have been earmarked as potential development areas, with the largest being the Pomona site. A high density residential area along with office access and supporting services are proposed. The creation of a marina in the vicinity is under consideration, located either within Pomona Docks or South Bay (Basin 6) at Salford Quays. A marina with safe moorings will encourage private boat owners to use the river not only providing the essential 'maritime' atmosphere, which only boat activity can provide, but also generating revenue to fund upkeep costs associated with the vision.



An ultra-modern development scheme is planned for the Pomona site



A marina with safe moorings will encourage private boat owners to use the river

ENVIRONMENT AND BIODIVERSITY

The aim here is not to try and make the Irwell into a pristine nature reserve, but to find a healthy balance between natural and urban environments. Fish spawning enhancements can be developed as well as creating floating islands to enhance habitat availability for insects, birds and fish. The fantastic improvement to river life seen as a result of the Ship Canal oxygenation project can be enhanced to increase biodiversity and conservation value at the same time as maintaining the heritage, recreation, leisure and commercial use of the waterway. This area has already established itself as a world leader in urban river restoration and the opportunity is now present to take the already impressive achievements to new levels of inner city recovery.



Disused Wilburn Street Basin – a suitable site for fish spawning enhancements

As linear structures, river corridors can bring wildlife into urban areas from remote locations and can provide linkages to isolated areas of ecological value found within the urban landscape. Connectivity can be achieved through encouraging the use of ‘urban hedgerows’ or ‘green corridors’; the use of trees, hedges and grassland to connect existing green areas to other ecologically valuable sites.



Floating islands provide visual amenity as well as ecological habitat

ACCESS TO THE WATER

The laying and reconstruction of a variety of pathways is proposed. New walkways underneath bridges can be fixed, floating or cantilevered or could be suspended from the bridge itself. A whole spectrum of riverside action and relaxation for people of all ages is envisaged. Activities might include jogging, walking, cycling, sitting on benches, angling, or simply enjoying being next to a waterway - a fundamental draw for all generations.



Safe pedestrian walkways are a fundamental in bringing life to the river corridor

Once the river was no longer required for transporting goods, we turned our backs on it and refused to treat it as a metropolitan asset. Attempts to block the river out of pedestrian view were successful, as shown by the infilling of the balustrade on Blackfriars Bridge, which has been used as a river crossing for over a hundred years. To return these bridges to their original state would not only create more attractive vistas both up and down river, but also allow the wider community to see and become involved with the river and the city. Overall social inclusion and a sense of ownership by the wider community could be achieved once people can see the river and realise that in central Manchester, Salford and Trafford they are literally surrounded by water.



Blackfriars Bridge in 2004 - the balustrade was infilled in the 1960's, preventing views of the Irwell

There is great potential and scope for new bridges across the Irwell in addition to the existing bridges, and in future it may be desirable to link existing and proposed developments. New bridges should be landmark structures embracing the past glories and future hopes for the city. They should form new focal points along the river and should be comparable to those recently constructed in the Manchester, Salford and Trafford area.



The potential scope for bridges is both wide-ranging and enticing

The 'Cathedral Steps' offer tremendous potential to recreate a major historic feature of the Irwell and reconnect the city with its river. Simply due to their position on the 'inside' of the riverbank, it is likely that the bricked up landing stages near Manchester Cathedral remain unnoticed by the majority of visitors and locals alike. These tunnels once provided access to Georgian streets, which still exist beneath the current Manchester roads.



Bricked up tunnels near the Cathedral that were used in the past to gain access to the landing stages

The potential for this area, not just to recreate the landing stages, but to provide an interesting commerce and tourist attraction is immense. Both the arches and the streets behind could become major features of the revival of Manchester City centre with innovative and imaginative designs.

ENCOURAGING TOURISM AND LOCAL INTEREST

Boat based activity including marinas, water taxis and tows are vital to establish and maintain the waterfront attraction and ‘feel’ of the vision. Access and expansive open views are also essential. In addition, a number of suggestions have been put forward as tourist attractions including new innovative ideas as well as identifying and restoring historic relics from the waterway’s past. New ideas include a major water feature such as a fountain or sculpture but on a world beating (Lake Geneva) scale. An international competition is suggested to maximise publicity and help to cement the vision at the appropriate time. Other ideas such a water wheel, which would provide a piece of our unique heritage in these modern times as well as providing aeration to the waterway for biodiversity improvements could also be considered. Lighting up the water wheel at night would provide an attractive focal point, as would imaginative lighting of the waterway itself.



A similar water wheel could be positioned outdoors on the Irwell and lit up at night providing a tourist attraction

Street furniture, signage and information boards should be located to enable users to leave the footpath at points of interest. Information boards could highlight viewing points, key landmarks, sites of ecological importance, increase awareness of local heritage and more along the route. Strategic positioning of such boards along the river could generate interest whilst at the same time signpost users to and from other destinations located in Salford, Trafford and Manchester City centre.

Many of the historic features present along the river corridor are hidden from view and, perhaps with the exception of some local knowledge, are also absent from mind. An example includes the link between the River Irwell and the Rochdale Canal, which

was provided by the Manchester and Salford Junction Canal. This canal was constructed underground, terminating in the city. Upon arrival, cargo was hoisted up to the warehouses via massive cranes. A further example is the water feed from the River Medlock to the Bridgewater Canal in Castlefield, which was a world first and still functions today. This feature would be a major attraction to heritage loving canal enthusiasts. The Bridgewater Canal itself as the world's first canal deserves wider acknowledgement, celebration and above all, use. In effect therefore, an outdoor museum could be created to identify these abundant interesting features, bringing history alive in the centre of the city.



Restored lock gates and cantilever footbridge at the old entrance to the Manchester and Salford Junction Canal

If the river can become a focus for leisure and tourism and is upgraded in the process, the visual amenity will be enhanced. The city will no longer turn its back on the Irwell and subsequently, with the development of businesses through regeneration and tourism, significant employment opportunities will develop within the area.

A positive effect on tourism and greater activity in the area would be stimulated as the availability and use of transport on the river increases. If successful, tourism could attract inward investment as the image of the area improves and it essentially becomes more desirable. There is the potential to link new and existing tourist attractions and enhance their use through, for example water taxi tours of Manchester waterways, allowing access at key points along the river between the Lowry and the Cathedral. One only has to look towards Salford Quays to see the enormous benefits of investing in the water resources of Manchester. Providing a safe haven for barge traffic in a secure marina would stimulate a new tourism market from the inland waterway network. The Quays and the Irwell would become a key tourist destination on the barge circuit.

HOLISTIC APPROACH AND PUBLIC PARTICIPATION

The regeneration of the Irwell River corridor would be made increasingly sustainable through the continuous involvement of stakeholders in the decision making process. At a more strategic level these can include Manchester City Council, Trafford Metropolitan Borough Council, Salford City Council, Manchester Ship Canal Company/Peel Holdings, Environment Agency, Mersey Basin Campaign, NWDA, local land owners and local businesses. The establishment of a steering group should ensure all partners are involved throughout the process to develop the nature of the vision.

At a local level, stakeholders could be seen to include people living, working and visiting the area along and within the Irwell River corridor and the different user groups such as the Agecroft Rowing Club, Salford and Manchester Universities.

Public participation and awareness is essential and the introduction of an awareness raising and involvement campaign could essentially reduce or eliminate existing negative perceptions held of the area. Engagement of the local community through educational activities, for example local schools taking part in clean-up exercises and recreational use of the river again will help increase and sustain awareness that the environment is improving. Clearly, there will be many opportunities for the local communities to become involved in public environmental events which the Environment Agency and others currently either organise or are involved.

In summary, the River Irwell has massive potential to bring about economic, social and environmental regeneration, focusing on its unique heritage and allowing it to be remembered for the spectacular past industrial achievements. The River Irwell could be a European destination embracing our cities unique and longstanding heritage and character.

KEY PROJECTS TO KICKSTART THE VISION

The River Irwell will be a landmark international urban waterway redevelopment scheme. It will be valued at many hundreds of millions of pounds and will require much more detailed dedicated professional design and development even at this early conceptual stage. Hence the true task, that of developing the 'blue sky' vision for the River Irwell is yet to be undertaken. This document merely represents the initial 'germ' of the idea.

However, several key subprojects which form part of the broader 'blue sky' vision were requested by the Environment Agency and represent comparatively small but significant ideas that will aid the realisation and potential practical further development of the vision.

It should be recognised that the projects that follow represent just a few key cornerstones of the Irwell vision and that many more will be required to make that vision a reality.

PROJECT I – NAVIGATION

The Vision

In order to recreate the hustle and bustle of the past, reintroducing boating activity on the Irwell is deemed essential. It is anticipated that a variety of boats will be seen on the water, including water taxis, commercial cruisers, pleasure craft and even dragon boats. Before this is possible however, three key issues need to be addressed. Firstly, dredging will be required along the stretch of the study area between Salford Quays and Victoria Station. In addition, facilitating access from other waterways to the newly navigable Irwell via lock gate replacement or restoration will be necessary. Finally, ensuring alighting/boarding facilities are of a suitable standard once boats have entered the Irwell is also important and will involve upgrading of existing landing stages as well as creating new landing stages.



Dragon boats are envisaged in addition to water taxis and pleasure craft

Ways Forward

- The minimum safe water depth required has been determined as 2m and it is proposed that the full width of the river be dredged. Capital dredging (calculated as 65,000m³) between Salford Quays and Victoria Station will be required initially. Further maintenance dredging will then be required periodically to maintain this depth due to silt levels in the river. Before any dredging work commences, a structural survey of retaining walls should be undertaken.
- Access improvements might involve restoration of the listed old Hulme Lock, which would provide a historic feature in addition to linking with the Bridgewater Canal. Behind the old Hulme Lock is an area that would potentially provide safe mooring for boats during high flows in the river.
- Issues requiring consideration in landing stage selection include aesthetics, costs, impact on flooding, and durability. At the Lowry Hotel for example, a concrete step already acts as an access point, and this could be further improved.

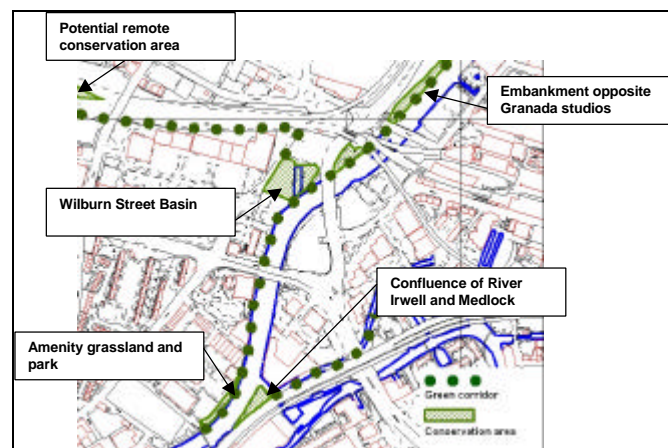
Estimated Potential Costs

- Capital costs for the full dredging process of approximately 65,000m³ (£45/m³ for removal & £100/m³ for disposal to landfill) ? £9 million. Maintenance dredging ? £500,000 per year
- Restoration of the old Hulme Lock (2 sets of 2 gates) ? £250,000
- Redesigning the access point at the Lowry Hotel to allow ramped access, construction of a floating landing stage and provision of ancillaries such as lighting, seating and information boards ? £150,000

PROJECT II – CONSERVATION AREAS

The Vision

In their natural state, the terrestrial elements of a river can provide a vast assemblage of ecotypes and habitats. The aim is to try to find a healthy balance between natural and urban environments and several locations have been highlighted as potential conservation areas. It is proposed that small pockets of biodiversity be developed which are linked by ‘urban hedgerows’. Improvements to the aquatic environment are also possible through fish spawning enhancements and creation of floating islands, which will enhance habitat availability for birds, macro-invertebrates and fish.



Potential conservation areas and green corridors

A kingfisher

Ways Forward

- At least two options are available for fish spawning enhancements. A simple option would involve the development of ‘scrapes’ or ponded areas, which would be engineered to some extent to protect against flows. The more complex spawning unit involves the use of side channels historically present but currently in-filled. Numerous bankside fishing pegs could be situated along the river.
- Planted islands such as those currently in Salford Quays act as both in-river habitats and are visually attractive. The installation of partially submerged Mersey ‘flats’ will allow growth of aquatic plants as well as retaining a heritage theme.
- Planting trees and hedges will aid visual amenity in addition to creating the important ‘green corridors’.
- To further develop the bird and bat communities in and around the river, both mixed species bird boxes and bat boxes should be installed at strategic locations.

Estimated Potential Costs

- Simple fish spawning unit ? £1,000 - £4,000
- Complex fish spawning unit (excavate & reconnect channels) ? £15,000-£20,000
- Bankside fishing peg suitable for disabled users ? £500
- 10 floating islands (materials, plants & labour) ? £8,000
- Trees (inc site prep & planting)?£10-£15/m² (native sp); £20-£30/m² (ornamental)
- 10 mixed species bird boxes (inc labour) ? £300; 10 bat boxes (inc labour) ? £500

PROJECT III – RIVER ACCESS

The Vision

No regeneration scheme is worthwhile unless adequate provisions are made to allow ample and safe access to the area. All new access facilities should link in with public transport facilities such as Victoria Station and Metrolink stations. Urban Splash has already undertaken considerable development of the waterway proposals to link up the city centre with the Greenbank site above Victoria Station. Extending the walkway to Salford Quays and connecting with other walking and cycle routes to the North (Irwell walkway) and the South (Bridgewater Canal towpath) will provide a central walkway/cycling hub that links the city centre into the national Sustrans network. From Manchester City centre, you will be able to walk or cycle onto the Pennine Way or into rural Cheshire.



The scope for walkway and bridge design is extremely exciting

Ways Forward

- The stretches of walkway in need of upgrading should be reconstructed to the level required. In places where pathways are missing, cantilevered walkways can be used if solid banks are present. Where possible the footpath should be at least 2m wide and well drained, with ramps provided for wheelchair users and also considering cyclists. Safety and practicality are of great importance; thus lighting, seating, handrails and exit/ingress points should be considered in the plans.
- New bridges should be comparable to those recently constructed in the Manchester, Salford and Trafford area. As well as being both functional and attractive, new bridges should be strategically positioned in relation to existing and proposed developments (e.g. Pomona Docks) for optimal use. Air draught of requirements of vessels using the Irwell should be considered in the design. Returning the historic bridges to their original state following blocking up of the balustrade would open up vistas of the river to the wider community.

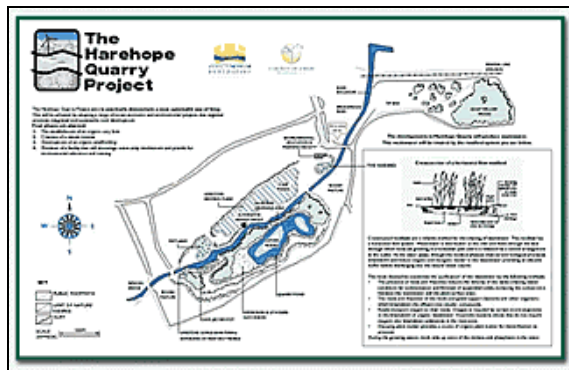
Estimated Potential Costs

- Walkways ?£2,000 per metre (cantilevered); £1,000 per metre (paved inc railings)
- Landmark footbridge comparable to others in the area ? £1 million - £1.5 million
- Moveable bridges (e.g. lifting or swing bridges) ? £5 million

PROJECT IV – LANDMARK FEATURE & TOURISM

The Vision

It is recognised that a central feature is required within the river corridor itself, which locals will admire and that will act as an attraction for visitors. Ideas include a large fountain or waterwheel wheel which focuses on the industrial heritage of the area and that can also be used for water aeration to benefit ecological needs. It is envisaged that the central feature and bridges alike will be lit up at night, creating a 24-hour attraction. The potential exists to highlight viewing points, key landmarks, sites of ecological importance, increase awareness of local heritage, views and so on along the route through the use of interpretation boards. An outdoor museum would effectively be created, identifying the plentiful historic features and linking up with other landmarks.



Example interpretation board

An ultra-modern waterwheel

Ways Forward

- Once the desired central feature has been decided, an international architectural competition could be launched both to maximise the number of designs from which to choose as well as securing world-wide recognition. Factors to consider when locating the structure might include navigation, flooding, access and visibility, bridge location, and so on. Alternatively or additionally, a more modern theme for the central attraction could be a solar powered water feature, for example.
- Key to interpretation board success will be their location and overall appeal. Boards should be located within 50m of major access points and enable users to leave the footpath at points of interest. It may be necessary to locally widen the footpath to allow pedestrians to pass whilst groups are gathered around the board. Linking board design into the type of street furniture introduced could reinforce the image of the corridor, for example highlighting the industrial heritage of the watercourse.

Estimated Potential Costs

- Wooden waterwheel (including on site engineering and foundations) ? £100,000
- Interpretation board ? £250 - £300 (wall mounted); £1,500 (free-standing)