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source NW

WATERS I REGENERATION I ENVIRONMENT I SUSTAINABILITY

RIVER REBORN SPECIAL ISSUE

The 25 year clean up of the Mersey is one of the world's environmental triumphs.

GRIFF RHYS-JONES
Can Griff swim across the River Mersey?

WHO SAVED THE MERSEY?
The amazing revival of Britain's most polluted river.

MERSEY WILDLIFE
Why the Mersey is internationally important for wildlife.

THIRTEEN FROM TWENTY-FIVE
Lessons from the Mersey clean up.

WORKING TOGETHER FOR englandsnorthwest













Congratulations to everyone who has played a part in the successful clean up of the River Mersey over the last 25 years.

Unilever has a long-standing commitment to the environment of the communities within which we operate and our support for the Mersey Basin Campaign is just one example of the company's dedication to this commitment.

We're proud to have sponsored the Unilever Dragonfly Awards for almost two decades, recognising some of the many volunteers whose efforts have revitalised the rivers and watersides of the Northwest.

Over the years the awards have honoured some outstanding and inspirational volunteers, whose dedication has helped others to enjoy the revitalisation of our rivers and waterways.

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MERSEY BASIN CAMPAIGN
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www.merseybasin.org.uk

After 25 successful years the Mersey Basin Campaign comes to the end of its planned lifespan in a few months time. So we make no apologies for monopolising this issue of Source NW with the story of the Mersey and the campaign to restore it.

The Mersey Basin Campaign was born from the ashes of the Toxteth riots almost thirty years ago, when Michael Heseltine's influence in Liverpool galvanised enthusiasm to clean up the river with which the city is synonymous. Today, against the odds, the Mersey is cleaner than at any time since the industrial revolution.

The story behind the river's rebirth is a fascinating one. One that illustrates the power of working in partnership – a way of working that the Mersey Basin Campaign is proud to have pioneered. A story that highlights the link between a healthy environment and a strong economy. And a story that reveals the Mersey as a haven for wildlife.

But there are still challenges ahead, not least in meeting the tough new environmental standards being demanded by European legislation.

For now, though, we want to thank the many, many people who have helped clean up the Mersey over the past quarter of a century, and celebrate what is recognised internationally as one of Britain's environmental triumphs.

Matthew Sutcliffe, editor
m.sutcliffe@merseybasin.org.uk

Source[NW] is the magazine of the Mersey Basin Campaign. The campaign works towards better water quality and sustainable waterside regeneration for the rivers and waterways of England's Northwest.
Supporting Liverpool's Year of the Environment 2009.

Cover Mersey sunrise by Dave Wood.

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Walking around

Government targets full access to coast.

Almost a thousand miles of new paths must be built if the government's goal of creating a single continuous route around England's coast is to be met, according to a new survey from Natural England.

The difficulty of providing access to the coast is illustrated in a series of new maps drawn up for the survey, which in many cases show access cut off by a combination of barbed wire, live ammunition and crumbling footpaths.

The maps show that of England's 2,748 mile long coast, only 66 per cent (1,827 miles) is currently served by a good quality, legally accessible footpath. The remaining 34 per cent (921 miles) has either no access or access only on permissive paths.

At 44 per cent (421 miles), access to the Northwest coast is well below the national average, thanks largely to the region's industrial past. Ports, shipyards, factories and the nuclear industry all put significant stretches of the region's coast out of bounds.

While the major obstacle is privately owned land with restricted access, elsewhere the coastal route halts at land owned by the Ministry of Defence, or else is made dangerous by coastal erosion. Even where access is possible, ramblers often enjoy little chance of a bracing stroll – on average, walkers can go no further than two miles before finding themselves without a satisfactory, legally secure path.

"The challenge is to move ahead from the stop-start effect which shows in the maps we publish today," said Poul Christensen, acting chair of Natural England. The prospect of extra visitors to coastal areas has won over all of the 53 councils involved in the mapping exercise, as well as most fishing and other coastal businesses.

"There will be ten years work to be done before we can walk the whole way," said Paul Johnson, coastal access manager for Natural England, "but we reckon that the first rights of way between major seaside towns could be in place by 2013."

However, the Country Land and Business Association, which represents 36,000 members, criticised the report. The group's president, Henry Aubrey-Fletcher, said: "It would have been better if the government did more to improve the quality of existing access, such as with the provision of car parks and toilets, rather than try to secure access to the entire English coastline."

The survey and its maps have been drawn up for the Marine and Coastal Access Bill, which is expected to become law in November. Natural England's chief executive, Dr Helen Phillips, said: "The fact that the public lacks full access to nearly a thousand miles of coastline is a sobering reminder of how much is at stake in the bill."

SOUND BITES

Flag it up. The Northwest has won 225 Green Flag and Green Pennant Awards for the quality of its parks and green spaces – more than any other region. Over 1,000 parks and green spaces across England and Wales won awards, an increase of 200 on last year. Winners included Truffet Park in Rochdale and Clayton Vale in Manchester. The team behind the awards says that as the recession bites people are looking closer to home to enjoy the outdoors, making high quality open spaces more important.

Sustainomics. The global problems of economic collapse, climate change and poverty can be solved, but only if early action is taken, according to one of the world's leading economists. Professor Mohan Munasinghe of the University of Manchester is a Nobel Prize co-laureate and Vice Chair of the UN Intergovernmental Panel on Climate Change. His new book urges world leaders to abandon their traditional emphasis on economic growth and instead tackle social, environmental and economic problems together, within an integrated framework he calls 'sustainomics'. "This book is a call to immediate action: we know enough already to address our problems, but only the political will is lacking," said the professor.

Tickets please. A Lancashire train station has been given a green makeover thanks to a £1.8 million refurbishment. Keeping as close as possible to its original architecture, Ormskirk station gets its green credentials by using eco-friendly building materials, harvesting rainwater for use in the toilets, installing energy saving LED lighting, adding extra insulation and using under floor heating. Existing materials have been reused or repaired where possible. Jim Cornell, executive director, Railway Heritage Trust, said: "The Trust is particularly pleased that 21st century eco-friendly design techniques have been embraced within the refurbishment whilst retaining the 19th century architecture."

Stern words. Liverpool could create thousands of new jobs by leading the fight against climate change and becoming a centre of excellence for low carbon technologies, according to a report released this summer. The report highlights the area's thriving environmental technologies sector, which already employs over 9,000 people and generates over £1.1 billion a year. "In essence, this report is a Liverpool city-region version of the national Stern report – a 'mini Stern' for our region," said Lorraine Rogers, chief executive of The Mersey Partnership. The report estimates that the Liverpool city-region could see up to 7,000 new green jobs in the next five to seven years.

Switching to low carbon energy

The Northwest is set to play a leading role in the nation's switch to a low carbon economy.

The government has set out its strategy to slash greenhouse gas emissions and lead the nation towards a low carbon economy. It aims to cut emissions by 34 per cent by 2020 compared to 1990 levels.

The strategy, the UK Low Carbon Transition Plan, is a route map to a low carbon economy. The plan opens the door for the Northwest to play a central role in the transformation – through the generation of low carbon energy, alongside leadership from the Northwest Regional Development Agency.

The plan adopts a two-pronged approach to weaning the country away from fossil fuels. Firstly, it aims to provide much more energy from low carbon sources, such as renewables, for use in power generation, transport and home heating. Secondly, while the plan accepts the nation's continued heavy reliance on fossil fuels for the remainder of its energy, it sets targets for significant reductions in the amount of fossil fuels used in transport, industry, homes and farming.

The government foresees 40 per cent of the UK's electricity coming from low carbon sources by 2020. The bulk of this, about 30 per cent of the country's electricity, will come from a leap in the amount of power generated from renewable sources – primarily wind, but potentially also tidal. The remaining ten per cent will come from new nuclear power stations plus new coal fired stations fitted with technologies to capture and store their carbon emissions underground.

The Northwest already has 140 sites generating renewable electricity, more than any other English region, and recent studies have highlighted the potential for tidal energy schemes in the region that could provide up to five per cent of the UK's electricity.

Energy Minister Lord Hunt said: "There are big untapped wind and tidal resources in the Northwest...and if these resources are harnessed the Northwest could continue to be the top region for renewable energy sites. The Northwest is also home to four of the potential sites for new nuclear power stations.

"Moving from high carbon fuels to low carbon green energy is an opportunity for us all. With new money...to support the development of wave and tidal power the Northwest's estuaries could also start generating clean energy."

Meanwhile, the country's nine regional development agencies will play a key role in implementing the new strategy, with the Northwest Regional Development Agency at the forefront as the lead agency for the Department of Energy and Climate Change. The agencies must include targets for energy and emissions reductions in their regional plans, help advise businesses on reducing emissions, support research into low carbon technologies and ensure a workforce suitably skilled to work in the low carbon and nuclear industries.

Steven Broomhead, chief executive at the Northwest Regional Development Agency, said: "Working directly with businesses and communities, England's RDAs are well placed to show strong leadership in a move to a low carbon economy, offering tangible, immediate benefits to the economy, industry and the environment.

PHOTOGRAPH: NORTH HOYLE WIND FARM, OPERATED BY NPOWER RENEWABLES, BY NORMAN CHILDS

S Adapting to change. A groundbreaking initiative aims to help protect Greater Manchester against the potentially catastrophic impacts of climate change. Eco Cities – a partnership between the University of Manchester and office provider Bruntwood – will provide a blueprint to help cities adapt to the likely effects of climate change, such as higher temperatures. Project director Professor Simon Guy said: "Work in Manchester will provide a living laboratory...Eco Cities will, for example, look at how trees, parks and green roofs can help cities to adapt to climate change using shading and evaporative cooling...Even if emissions were stopped tomorrow there would be decades of climate change to contend with."

S Energy boost. A new £4.4 million programme will pay up to half the cost of installing biomass energy systems in an attempt to encourage SMEs to reduce their carbon emissions. The scheme is being funded by the Northwest Regional Development Agency and run by Envirolink Northwest. According to Envirolink, biomass is substantially cheaper than traditional fossil fuels and the Northwest has the best biomass fuel supply chain in Great Britain. The programme runs until March 2012 – contact Nigel Blandford on 01925 813200.

S Award winner. A Cumbrian man who set up one of the first recycling services in his area has been named the Northwest's top green campaigner in the Northwest Business Environment Awards 2009. Colin Nineham, from Penrith, set up a paper recycling point at Penrith Fire Station in 1980. The dedicated recycler began by sorting everything by hand, but as the public began to use the paper recycling point demand grew and recycling points for cans, glass, cartons and plastic were added. Now, Eden Community Recycling is regarded as the most comprehensive service of its kind in the region. Mr Nineham is also now leader of Eden District Council.

S Opinions wanted. Less than one per cent of the country's seas are currently protected, but a new project aims to conserve the varied environment and wildlife of the Irish Sea, which includes honeycomb reefs, leatherback turtles, a dozen species of whales, dolphins and porpoise, and the world's second largest fish, the enormous basking shark. The area is also vital to fishermen, shipping, marine industries, anglers and boaters. The project aims to balance these interests and recommend sites to become special marine conservation zones in 2011. Comments are encouraged from anyone with an interest in the Irish Sea – call Matthew Sutcliffe on 01925 813200.

Lôve

Why I love… my Fiat 500. By Cathy Elwin.

It's nippy for city driving, absolutely tiny so perfect for parking, costs just £35 a year in road tax because of its low emissions and I was able to design in all the extras I wanted from the website to make it completely individual… what's not to like?" enthuses Cathy Elwin, clearly a woman who doesn't believe you have to be grungy to be green.

She's talking about the gleaming black Fiat 500 (with bright red interior) in which she's been scooting around Liverpool city centre for the last year. The newly designed version of this classic Italian city car has just won What Car's Green Award for a supermini priced between £8,000–£14,000 for the second year in a row – and it's not hard to see why.

"I bought it because I was looking for something smaller, more economical, and with a lower road tax and lower emissions," explains Cathy. There's no point pretending that a car can compete with a bicycle on its CO_2 credentials, but Cathy chose a diesel, which does better than petrol on miles per gallon – around 60mpg for her 1.3 litre model – though somewhat worse on its PM10 (particulates) rating.

If you want a glamorous car, but don't fancy being hit with a similarly glamorous insurance quote, then this stylish model fits the bill. It's in insurance group four, so once you've paid your annual premium you should still be able to afford to drive away in your newly acquired wheels. Even with the high price of petrol these days, filling up the tank only costs twenty-five quid.

Mind you, there's always the fear when tootling along in a teeny weeny little car that you'll come off rather worse for wear if hit by anything larger than an insect.

"Hmm, well, it's not like one of those old Minis, where you felt really low down and vulnerable," says Cathy. "It has a bit of oomph, so it's fine on the motorway. I don't feel like I'm about to be squished."

The designers of the new 500 also appear to be as concerned about your survival as they are about the planet's, and have ingeniously installed no less than seven airbags to cushion as much of you as possible – even the driver's knees are protected.

It's not just Cathy who rates her car – Jeremy Clarkson gives it four stars out of five – though he's more concerned with its ride and looks than its carbon wheelprint. But if the fun and friendly Fiat can convince an arch eco-sceptic like Jeremy, then who are we to argue?

WORDS + NUMBERS

The government has set out its strategy for putting the UK economy on a low carbon footing – the UK Low Carbon Transition Plan. It calls for:

18%
cut in carbon emissions on 2008 levels by 2020.

£120 million
to be invested as the government pursues a massive expansion in offshore wind power, with a further £60 million on marine energy.

40%
of the nation's electricity to come from low carbon sources by 2020, including 30 per cent from renewables and 10 per cent mainly from nuclear and coal fired power stations fitted with carbon capture and sequestration.

£3.2 billion
spent to help households become more energy efficient.

1.2 million
jobs in low carbon industries are expected to be created by the middle of the next decade.

6
towns or regions will be selected to receive charging points for electric cars in a scheme costing £30 million.

£75
increase a year on domestic electricity bills needed to pay for the changes.

15
towns, cities and villlages will be chosen to pioneer green innovations.

How to...make power from pooh

Sometime early in 2011 a scheme in Manchester will begin injecting biogas made by treating human sewage sludge into the National Grid – enough of it to supply around 500 homes. According to a recent report from National Grid, the technique behind the scheme – already used successfully on the continent – could one day supply almost half the household gas used in the UK. In the process it would reduce our dependence on foreign gas and dwindling North Sea reserves, cut the amount of waste sent to landfill, and take a chunk out of the country's carbon emissions.

Britain's second largest wastewater treatment works – United Utilities' massive Davyhulme plant on the outskirts of Manchester – will be home to the new project. It relies on a well-proven process known as anaerobic digestion. Sewage sludge is placed in huge tanks where special bacteria break down, or digest, the organic matter. The process is carried out in the absence of oxygen, or anaerobically, and results in a methane-rich biogas suitable as an energy source. Once cleaned up by removing contaminants like carbon dioxide and sulphides, it's virtually indistinguishable from natural gas from the North Sea and can be distributed through the same pipelines. Crucially, the biomethane that might otherwise be released into the atmosphere is a greenhouse gas around 20 times more powerful than carbon dioxide.

Of the 167 cubic metres of clean biomethane produced each hour, 87 cubic metres will be injected into National Grid's local gas distribution network, while the remainder is used to fuel a fleet of 24 of the water company's sludge tankers. United Utilities estimates that a scaled up system at Davyhulme could supply gas for 5,000 homes.

In fact, most sewage treatment plants already burn raw biomethane to produce electricity. Davyhulme itself has a combined heat and power system burning the gas to produce around 3MW of electricity a day. But burning the gas directly for heat or cooking in homes is much more efficient.

Making the project possible is £4.3 million from the government's demonstration programme for anaerobic digestion, which is providing a total of £10 million to five demonstration projects around the country. Others produce biomethane from municipal waste, dairy by-products and vegetable trimmings. Although in its infancy in the UK, anaerobic digestion is commonplace worldwide. India and Thailand have several thousand mostly small scale plants. Denmark has a number of farm-based plants that produce electricity and district heating for local villages. Plants have also been built in Sweden to produce vehicle fuel for fleets of town buses, and Germany and Austria have several thousand on-farm digesters treating mixtures of manure, energy crops and restaurant waste, with the biogas used to produce electricity.

So anaerobic digestion is a proven technology that produces renewable gas from waste, including sewage – which, as United Utilities points out, is in constant, abundant and endless supply.

And that's how you make power from pooh.

UNITED UTILITIES' BIOFUELS MANAGER CAROLINE ASHTON WITH JOHNNY JOHNSTON, PROJECT MANAGER FOR NATIONAL GRID, AT THE DAVYHULME TREATMENT WORKS.

Interview by Matthew Sutcliffe

Photographs Paul Cornwell and BBC/Modern TV

For this series you tried to swim across the Mersey, accompanied by open water swimmer Dave Sandman. It's a tough swim and Dave was impressed with your attempt. How did it go?

Well, it was good. We did it in August and I imagined it would be a beautiful day. I don't know why I thought that. It turned out to be a sort of storm tossed, grey day and the Mersey was looking threateningly bleak and I hadn't quite realised how far across it was from Birkenhead to Liverpool.

So we plunged in and it was freezing cold, but after a little while it got better. But we hadn't got very far when a tanker started coming down the river – it was a big bugger – and the tide started to change. And so everybody got out and that was sort of the end of that. So it wasn't very successful I'm afraid.

At the other end of the river you went underground with a breathing apparatus team from the Environment Agency. What happened down there?

I went down into Moston Brook with the guys and they told me that the biggest thing they ever had to get out of a similar culvert was a mini, which had been washed down there. But it was a little bit smelly. I didn't make a big thing about it on the telly but it was, because it had been raining pretty heavily and there was a little bit of overflow going on down there.

But it's a very beautifully built thing, I must admit. It was a splendidly conceived arch of rather elegant Victorian brickwork and it was fantastic to walk down it. More elegant underground than what they've put up on top in the various new estates, I thought.

The team leader is a guy called Mark Whittaker who's been in the army. They were a great team, very supportive, and they said 'isn't this great, Griff?'. And it was great for a while, but I wouldn't have taken their jobs for anything.

So you decided to make this series about rivers – what's special about them for you?

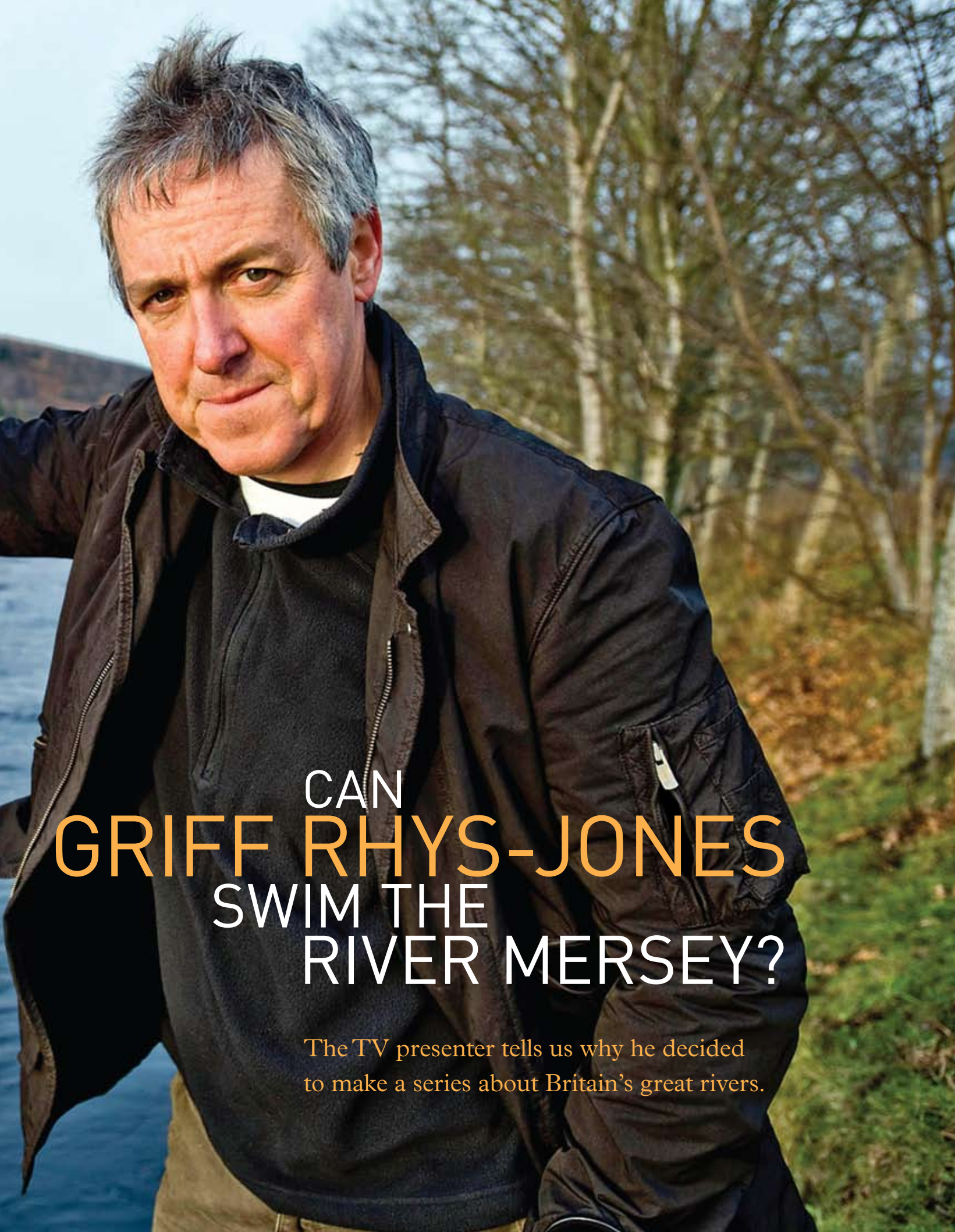
Well, I live on a river and I'm sort of drawn to the water. My father had a small boat, so I've always felt that it is impossible to live without some quantity of water nearby. It's something to do with not being enclosed in the countryside, because water has a life of its own.

It's enshrined in the Magna Carta that we should have access to rivers and I'm in favour of people having access to them. They are a great life enhancer, a sort of corridor of natural elegance and beauty through our landscape. And one of the most harmless ways of exploring them is to sit yourself in an unpowered raft or canoe and drift along. I am absolutely staggered by the fact that such a wish is seen as so radical by many people who have the riparian rights [of access] in this country, and I think we need to change our attitude to that.

I think the public love rivers and are very respectful of them. The best way to maintain interest in them is not to keep them just for the water authorities, or for canoeists or for fisherman, but to try and find a way of bringing everybody to the riverbank and allowing them to use the river – not to piss in, but to enjoy. Because they are beautiful, spiritually nurturing things and when you view a river in full flood running down through a beautiful valley, then you feel you are somewhere special. It is also a landscape that is changing all the time and being adapted. There's great beauty in our rivers.

When you see the way that rivers can meander across landscapes, the way that they create and are part of the landscape, it's part of the joy of being by a river, I think.

The book that accompanies Griff's series, *Rivers: a journey into the heart of Britain*, is available in bookshops.



CAN GRIFF RHYS-JONES SWIM THE RIVER MERSEY?

The TV presenter tells us why he decided to make a series about Britain's great rivers.

WHO SAVED THE MERSEY?

The clean up of the River Mersey is one of Britain's environmental triumphs. How did it happen?

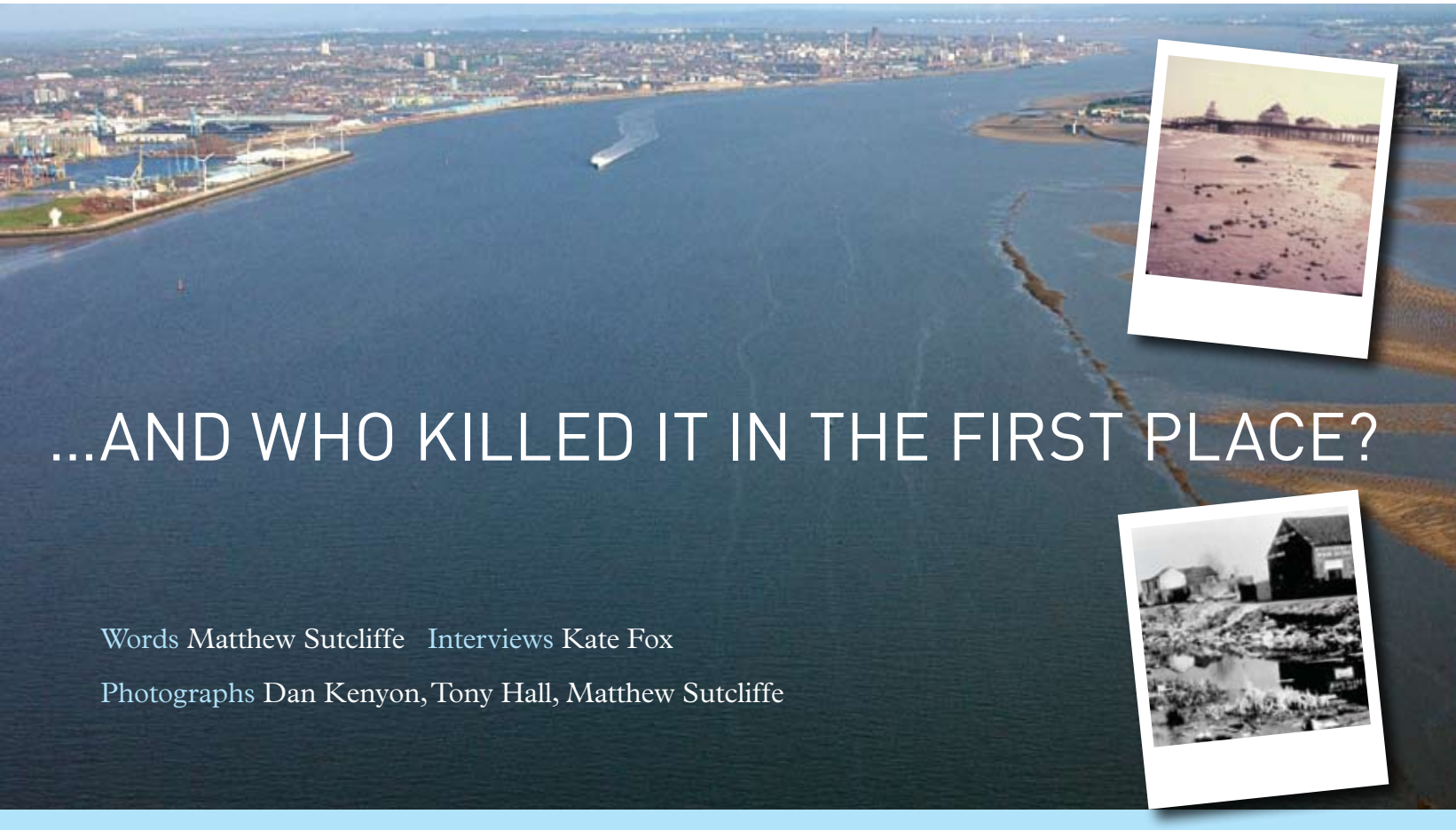
CHRIS CLEAVER, CANOE ENGLAND
"I FIRST CANOED ON THE MERSEY [NEAR STOCKPORT] FIFTEEN YEARS AGO. THE RIVER WAS RUNNING QUITE HIGH, AND THERE WAS LOTS OF DEBRIS FLOATING ALONG. WE WERE ACCOMPANIED FOR PART OF THE TRIP BY A COW'S HEAD, WHICH MUST HAVE BEEN THROWN OVER FROM AN ABATTOIR. I FELL IN, AND WAS SICK THE NEXT DAY."

FACTS AND FOLKLORE

The Mersey drains an area of 4,680 square km, from the Irish Sea to the Pennines, taking in all of Merseyside and Greater Manchester, most of Cheshire and parts of Lancashire and the High Peak District.

FACTS AND FOLKLORE

The Mersey was the ancient boundary between the Saxon kingdoms of Mercia and Northumbria – the name Mersey originates from the Old English 'maere', meaning boundary.



...AND WHO KILLED IT IN THE FIRST PLACE?

Words Matthew Sutcliffe Interviews Kate Fox

Photographs Dan Kenyon, Tony Hall, Matthew Sutcliffe

When the idea of cleaning up Britain's filthiest river was first seriously suggested in 1974, the Liverpool Daily Post commented:

"Most dangerous of all the confused thinking is the idea that environmental interests cannot be challenged. It will cost more than £100,000,000 to clean up the Mersey, yet no one dare ask is it worth it.

"The cost will increase before the clean up project starts, if ever; £100,000,000 to bring back salmon to Runcorn Bridge and let a few eccentrics swim in the river...

"Every politician recognises the difficulty of raising the money, but to say it isn't worth it would be political suicide, a latter-day heresy."

Just eight weeks earlier, a young Dr Peter Jones had begun work at North West Water, which was responsible for keeping the region's taps running and toilets flushing. Today, Jones is the world's leading expert on the state of the Mersey. For over three decades he has studied, researched, written about and indeed sailed on the Mersey. Few people have been more amazed by the remarkable story of the river's 25 year clean up.

"When I joined North West Water in 1974 the rivers in the Northwest were gruesome," says Jones. "Whether you looked at the chemistry or the biology, by any indicator the Mersey was as bad as you could get."

The river was awash with a deadly cocktail of raw sewage and toxic chemicals, and people in Liverpool joked that you couldn't drown in the Mersey because you'd die of poisoning first. Virtually lifeless, the Mersey estuary was possibly the most polluted in the whole of Western Europe.

Yet today the Mersey is flourishing. Not only has wildlife returned, but the cleaned up river has also attracted massive waterside development.

It started on the Liverpool waterfront – now a World Heritage Site – with the restoration of the famous Albert Dock in the 1980s. Beside it a new arena and conference centre opened last year and has proved a roaring success. Nearby, a brand new cruise liner terminal allows some of the world's most luxurious ships to dock on the Mersey once again. This year a new £22 million canal link was opened, bringing narrowboats right into the Albert Dock. The canal runs past the site where the £72 million Museum of Liverpool is nearing completion, with vast windows taking in the riverscape – the largest new museum built in Britain in over a century. New apartments, hotels and offices have spread along the waterfront.

At the opposite end of the river, spectacular regeneration has also transformed Salford Quays on the Manchester Ship Canal (part of the Mersey system). Land that was once essentially worthless is now home to the Imperial War Museum North, the Lowry arts centre, apartments, retail outlets and offices. The massive new MediaCity development, including the new headquarters for the BBC in the North, is being built by Peel Holdings and will open in 2011.

So who killed the River Mersey, and who cleaned it up again? Who paid for it, and has it been worth the staggering cost?

[CONTINUED OVER]

DR PETER JONES
"WHETHER YOU LOOKED AT THE CHEMISTRY OR THE BIOLOGY, BY ANY INDICATOR THE MERSEY WAS AS BAD AS YOU COULD GET."

FACTS AND FOLKLORE

The River Mersey is roughly 110 km long (70 miles). The combined length of the Mersey and all its tributaries is around 1,700 km (1,056 miles).

The 12th century monks who rowed passengers across the broad river near what is now Liverpool must have known a pristine Mersey teeming with life. Over 40 different species of fish thrived in its waters, including sea trout and the mighty Atlantic salmon.

As late as the 1760s the right to fish the abundant river cost as much as £400 per year. Within two decades, however, the industrial revolution had begun its profound reshaping of the Northwest of England. With fast flowing rivers and accessible ports, the Mersey and its tributaries were an ideal setting for the newly mechanised spinning and weaving industries. Manchester became the world's first industrial city,

MICHAEL HESELTINE
"...TODAY THE RIVER IS AN AFFRONT TO THE STANDARDS A CIVILISED SOCIETY SHOULD DEMAND OF ITS ENVIRONMENT."
PHOTO **COLIN MCPHERSON**

"You couldn't drown in the Mersey – you'd die of poisoning first."

Liverpool the great port of the British Empire. From the original cotton mills new industries grew, diversified and prospered. The population exploded as workers flooded in to take up the new jobs.

The rudimentary sanitation of the time was utterly overwhelmed. After cholera broke out in Liverpool in 1848, killing hundreds, the city built a new sewage system – it saved lives, but emptied directly into the River Mersey. Other towns and cities took a similar approach. By the 1960s the raw and partially treated sewage of five million people was being disgorged into the Mersey and its tributaries.

Meanwhile, the Mersey became home to a huge variety of industries – chemicals, abattoirs, tanneries, detergent manufacturing, even food processing – all pouring effluent into the river. Peter Jones explains: "This was the birthplace of the chemical industry worldwide, so we had dangerous chemicals of all kinds – lead, mercury, nickel, cadmium, as well as organic chemicals like solvents. Thirty years ago, if it was a man-made chemical you could pretty much find it in the Mersey."

By the 1970s the river had probably reached its low point. But it was now that the tide began to turn. In 1973 Britain entered the European Community (EC). For those who wonder what Europe ever did for us, Peter Jones is unequivocal. "The only reason the river got cleaned up was the law. We joined the EC and a whole load of Dangerous Substances Directives came into effect that forced us to clean up the rivers." Europe has been driving the clean up ever since, setting tougher and tougher standards that culminated in the far reaching Water Framework Directive.

In 1974 the Regional Water Authorities came into being – the first time bodies had even existed with the power to make and implement plans for cleaning the nation's rivers. Nevertheless, neither the Labour nor Conservative governments of the day found the money to fund a comprehensive clean up.

Things began to change when Michael Heseltine arrived in Liverpool in 1981. As Secretary of State for the Environment under Mrs Thatcher, Heseltine headed north in the smouldering aftermath of the Toxteth riots, two weeks of violence, looting and arson that had left one young man dead and many more injured. Heseltine soon homed in on the issue of the Mersey. "Alone, every night, when the meetings were over and the pressure was off, I would stand with a glass of wine, looking out at the magnificent view over the river and ask myself what had gone wrong for this great English city."

On one of his regular return visits to Liverpool Heseltine asked how much it would cost to clean the entire river. The answer came back that it would take £2 billion over 25 years. But Heseltine was repeatedly told that he could not simply clean up the Liverpool end of the river because there would still be pollution coming in at the top. Responsibility for the river along its entire 70-mile length lay with myriad different organisations. What was needed was a body that could bring everyone involved together. In 1985 the Mersey Basin Campaign was born with a 25-year lifespan, charged with facilitating the river's clean up and – reflecting Heseltine's original beliefs – with encouraging the waterside investment that would help bring jobs and prosperity.

MERSEY BASIN CAMPAIGN

In the 1980s, when people first began to look seriously at how the River Mersey could be cleaned up, it soon became evident that the task would require co-ordinated action from many different people and organisations, massive investment and a time scale of around 25 years. The water companies, regulator, industry, local authorities and local people would all need to work together.

In response, the then Environment Secretary Michael Heseltine called a series of meetings out of which was born the Mersey Basin Campaign.

Heseltine's insight was to recognise the relationship between environmental improvement and economic regeneration. The Campaign's role was to improve the quality of the water in the Mersey and encourage the regeneration of derelict land beside the river and its tributaries. (It has since expanded to include the River Ribble in Lancashire). To be effective, it would also need to reach out to local people living near the rivers.

The Campaign broke new ground in British administrative practice with its uniquely collaborative programme. At the time, most partnerships operated just between the public and private sectors. The Mersey Basin Campaign partnership was conceived differently from the start. Although the organisational structure changed over time, the emphasis on partnerships remained central, and today the Campaign is recognised as a pioneer of effective partnership working.

To take action on local stretches of river and to reach out to the people living nearby, the Campaign set up a network of over 20 local action co-ordinators, working closely with volunteers, schools, businesses and politicians on wide range of improvement projects (see pages 16–17).

In 1995 a team from Liverpool University led by Professor Peter Batey (now chair of the Campaign) published the Mersey Estuary Management Plan, the first plan of its kind in the UK. Setting a framework for coordinated action among the local authorities and interest groups on the estuary, the plan uncovered a complex web of issues including shipping, economic regeneration, physical regeneration, recreation, tourism and nature conservation.

More recently the Campaign helped facilitate the unique oxygenation project run by United Utilities that has pumped new life into the Manchester Ship Canal at Salford Quays. It also worked with international partners on projects that created major new nature reserves in Stockport and Liverpool.

In February 1982, Heseltine announced the go-ahead for the costly second part of the Control of Pollution Act 1974, a massive four-year programme set to commence the following summer. A special increase in water rates helped pay for it, as did funding of around £40 million from the European Community. At last the 28 pipes discharging raw domestic sewage from Liverpool into the Mersey could be intercepted by a new pipe and diverted to a huge purpose-built treatment plant at Sandon Dock.

Five years later the £300 million plant came online. United Utilities' operations manager Alex Bolton explains: "Sandon is the second largest treatment works in the Northwest, capable of treating up to 950 million litres of wastewater per day up to the stringent standards imposed by UK and EU law."

The impact on the river was huge, but it was only the start. In 1989 the water industry was privatised, unlocking new funding from investors, efficiency savings and through increases in water charges. A series of five year programmes have seen around £8 billion spent improving wastewater treatment all over the Northwest, first by Northwest Water and then by its privatised successor, United Utilities. Raw sewage outfalls were intercepted and treatment standards steadily increased in response to tougher regulations. The scale and complexity of the work over 25 years has been vast but, as Peter Jones says: "United Utilities has done a good job...it's been an unqualified success." The next round of investment, covering the five years to 2015, will see millions more spent improving standards.

[CONTINUED OVER]

FACTS AND FOLKLORE

Today, the Mersey officially starts beneath the Merseyway shopping centre right in the middle of Stockport, where the Rivers Goyt and the Tame meet. But according to folklore it used to start upstream in Marple. At some point a careless mapmaker mislabelled the local rivers, and ever since the Mersey has started in Stockport.

THE START OF THE MERSEY, STOCKPORT

THE ACTUAL BEGINNING IN DERBYSHIRE?

Louise Morrissey
Director of Land and Planning, Peel Holdings

Peel's involvement with the Mersey Basin Campaign has helped us set our own environmental agenda, not because we have to, but because it is the right thing to do. I think when you have a partner like the Campaign banging on the door, it becomes a self-fulfilling prophecy in that private companies like Peel do things better by association.

On the ground, the biggest change I've seen is the fantastic Speke and Garston Coastal Reserve, a project I've been involved with since the very beginning. I remember going down there in the early days and I must admit that the memory of feeling threatened and in the wrong place at the wrong time will never leave me. Rolling forwards five or six years, I remember the Walk For Health that we did at the opening of the reserve, and it was a tremendous feeling, not least because there were all sorts of people there – families and dog walkers – enjoying the reserve at the same time.

That's testament to the change around that's happened, and stems directly from the energy that the Campaign brought to that piece of land.

FACTS AND FOLKLORE

In 1848, James Newlands, Liverpool Borough Engineer, reported:

"The whole of the sewage is still thrown into the river…and all of it at such points as to act very prejudicially on the health of the town. It becomes therefore a consideration of vital importance how to relieve the river from its pollution."

FACTS AND FOLKLORE

Writing in his *Conditions of the Working-Class in England In 1844*, Friedrich Engels described one of the Mersey's tributaries in Manchester:

"At the bottom flows, or rather stagnates, the Irk, a narrow, coal-black, foul-smelling stream, full of debris and refuse, which it deposits on the shallower right bank. In dry weather, a long string of the most disgusting, blackish-green, slime pools are left standing on this bank, from the depths of which bubbles of miasmatic gas constantly arise and give forth a stench unendurable even on the bridge forty or fifty feet above the surface of the stream."

FACTS AND FOLKLORE

Liverpool-born Dr William Henry Duncan witnessed first hand the link between sanitation and disease. He was appointed the city's Medical Officer of Health in 1847 – the first such appointment in Britain – and went on to become the country's first Chief Medical Officer.

FACTS AND FOLKLORE

Five million people live in the area drained by the Mersey.

United Utilities works towards water quality standards that in this country are enforced by the Environment Agency. Clive Gaskell, regional environmental planning manager for the Environment Agency in the Northwest, says: “We have an excellent working relationship with United Utilities at every level. We share the same environmental goals, even if we have slightly different agendas on how to reach them.

“At the end of the day we both want a good deal for the water charge payer and the environment – it’s important to remember that consumers pay for the improvements through their water bills.”

The Environment Agency also monitors the processes used by industry, the other major source of pollution. “The change in attitude... has been dramatic,” says Clive Gaskell. “No industry can now operate outside the environmental standards, and the standards are so much higher.

“The penalties for non-compliance – and the damage done to a company’s reputation – are potentially severe. It’s a different mindset these days. A breach of a permit is now seen as a major failing.”

So who did clean up the River Mersey? Michael Heseltine, United Utilities, the Environment Agency, industry, the European Union, the Mersey Basin Campaign, scientists like Peter Jones, or the great water bill paying public of the Northwest? Certainly Heseltine’s conviction that a reborn Mersey would help drive the economic revival of Liverpool and indeed the Northwest has been spectacularly borne out. But of course, the answer, as Heseltine recognised over 25 years ago, is that one of the world’s great environmental success stories required a campaign involving all these people and more.

Mark Atherton
Director of Environment and Energy, Northwest Regional Development Agency

I think the Mersey Basin Campaign’s greatest strength has been that it exemplifies something the Northwest is really, really good at – creating partnerships that are cohesive, add value and really work. I’ve worked in other regions where that ethos doesn’t exist, and trying to create it is extremely difficult.

What the Campaign has done throughout its life is bring together disparate groups from business, the public sector and the voluntary sector, right down to individual members of the public, and made them feel part of something far bigger than they could ever be acting alone.

WHO OWNS THE MERSEY?

The Crown Estate owns the foreshore and bed on the Birkenhead side of the tidal sections of the River Mersey, to the centre point of the river. Much of the Liverpool side of the tidal river is owned by the Duchy of Lancaster, which is the major owner of the foreshore between the centre point of the Mersey and Barrow-in-Furness.

TOM WORKMAN, LIVERPOOL SAILING CLUB:
“WHEN WE STARTED SAILING THE WATER WAS LIKE LIQUID COAL, WITH WHAT WE’D CALL MERSEY TADPOLES IN IT. BIG BALLS OF FAT USED TO COME FROM THE MARGARINE WORKS, IT WAS ABSOLUTELY DISGUSTING. THE DIFFERENCE NOW IS FANTASTIC – WE CAN SEE OUR FEET WHEN WE STAND IN THE WATER!”

THE WIRRAL
BY IAN LAWSON PHOTOGRAPHY

FACTS AND FOLKLORE

Over the last 25 years United Utilities and its predecessor North West Water have spent around £8 billion cleaning up the sewage that once polluted the river.

SEWAGE OUTFALL, GARSTON

FACTS AND FOLKLORE

In 1999 the restoration of the River Mersey won the inaugural World Thiess Riverprize for the best river clean up anywhere in the world.

FACTS AND FOLKLORE

Since the Mersey clean up began the Environment Agency has recorded Minke whales, harbour porpoises and dolphins near the mouth of the river, along with octopus, squid, cuttlefish, crabs, jellyfish and shrimps. Seals have been seen as far upstream as Warrington.

FACTS AND FOLKLORE

The 36-mile long Manchester Ship Canal was opened by Queen Victoria in 1894. Outside Manchester it first merges with, then separates from, the Mersey, before reconnecting to the Mersey Estuary. It took an average of 12,000 navvies seven years to build at a cost of £15 million. Initially it was a financial disaster, failing to recoup the huge costs. But by 1963 Manchester was the UK's third busiest port.

Dr Jeremy Carter
University of Manchester

Who will take responsibility for the Northwest's water environment in the future?

As an idealist, I'd like to think that the public could assume a greater role in this agenda, and people could really take responsibility for their local water environment. In some places this is already happening, which is partly down to the catchment-based approach taken by the Mersey Basin Campaign.

I'd also like to see the natural environment itself playing a bigger part. When you're looking at challenges like flood risk, or water quality, just leaving the natural environment to do what it's there to do – for example to provide a buffer against flooding, or to absorb pollutants – can be very helpful. If that could be built into the system a bit more, that would be ideal.

In reality, though, I think it comes down to three groups – the local authorities, the water provider, United Utilities, and the Environment Agency. Within that, I think the local authorities have a particular role to play, as they're responsible for land use and development, and many of the problems we see are related to changes in the use of land. Increasing the role and responsibility of local authorities is important, but obviously that does bring resourcing issues of its own.

FEEL GOOD FACTOR

People from around the Northwest are finding that green volunteering brings its own rewards.

Words Helen Clifton Photograph Karen Wright

Kevin Smith has a passion for plants – and as a project manager working with children with special needs, it is a gift he carefully nurtures in his pupils.

Christopher Brown and Alex Edwards, both pupils at Oaklands School in Cheshire, look on in wonder as Kevin, a trained horticulturalist, works with them in the school's unassuming wildflower nursery. He patiently explains that the pretty purple flower they are holding is actually wild onion.

As Kevin explains, learning to nurture and grow is an important life skill for Oaklands pupils.

"When you see a child planting something, and they are chuffed about it, you can see it in their face. They love it. It might be something small like a daisy, but they are proud of it.

"You can't beat that."

The garden is just one of a bewildering array of projects that makes the school a hotbed of environmental action. It all started over a decade ago, when Kevin first got involved with Mersey Basin Week at the nearby Weaver Parkway, the valley running between Winsford and Northwich.

The motivation and inspiration provided by the annual volunteering event – and the advice and support of local action coordinator Ann Bates – encouraged pupils to go on to bigger things. By completing their own applications and research, the students have secured thousands of pounds worth of funding.

Through their efforts, the Weaver Parkway now features stone seats, sculptures, pond dipping facilities with wheelchair access and microscopes that allow students to investigate plants. Other local schools have helped with the building of a bamboo den for Oakland's latest exhibition at the RHS show in Tatton Park, their fourth year at the event. And three years ago adults with learning difficulties from local day centres took part in an arts and science week.

"It all stems from the likes of Ann. She came in and gave us the support when we needed it. The only thing we can give back is our work and our time. And it's paid off," says Kevin.

"She helped us with everything. She helped us with applications for small grants, she helped organise events. We got a £5,000 grant for the arts and science week.

"Without Ann we would have been stuck. She has helped the kids realise bigger goals. If you had come to this school 15 years ago, no one would have believed that we would be entering the RHS show.

"If anyone is interested in environmental work, Mersey Basin Week is a brilliant stepping stone to move on and take it more seriously. Our kids get as much out of environmental projects as they do from sitting in a classroom."

The school still gets involved in Mersey Basin Week every year. "I think Oaklands epitomises what Mersey Basin Week is about," says Ann. "It's about involving people of all ages and abilities in their local environment in as many different ways as possible."

Other Mersey Basin Week events have helped bring neglected areas of the region's city centres to life. Kin Chen, of the Manchester Oriental Organisation Association, wanted to get involved in the regeneration of Manchester's canal network, which runs past the city's vibrant China town.

So in 2007, Mersey Basin Week saw the first canalside walk for members of Manchester's Chinese community. Three years on, the two-hour walks for the over-sixties have become a popular monthly feature with up to 20 regular participants.

> "If anyone is interested in environmental work, Mersey Basin Week is a brilliant stepping stone to move on and take it more seriously."

The Mersey Basin Campaign arranges for a guide to talk walkers through the history and wildlife of the waterways – and with Kin translating through a megaphone, it's a genuine cross-cultural exchange.

"The walk brings the residents together," says Kin. They take it as a health exercise, but they also treat it as a social gathering. Afterwards, they go for dim sum at one of the Chinese restaurants."

"We always encourage integration into mainstream society, so this is a very worthy exercise for us. We know more about the history of Manchester and the whole of the UK. Every time it is different, and it is very informative."

The spirit of volunteering fostered by Mersey Basin Week has also been recognised by some groups as having a crucial part to play in tackling social problems.

"Given some of the issues on the estate, with anti-social behaviour, drugs and crime, we are always looking for ways to promote inclusion," explains Zul Hussain, who works at the Inland Revenue but volunteers with the Fishwick Rangers Youth Development Scheme in Preston.

Last year, he received a £100 grant from Mersey Basin Week to organise a clean up around a local recreation ground. The 15 local volunteers, aged from 12 to 21, dressed up as superheroes and cartoon characters, including Spiderman and Yogi Bear. And as Zul explains, participants took real pride in their costumes.

"People were being very picky. It took us about three and a half hours to get the outfits from the shop." he laughs.

Bolstered with enthusiasm after winning a Unilever Dragonfly Award for their project, Zul and his volunteers plan to design and build a sculpture as part of this year's Mersey Basin Week.

"It was fantastic. Perhaps some of the older people feel that younger people don't contribute anything positive, but it gave young people a chance to give something back to their community."

PHOTO: KEVIN SMITH AND OAKLANDS PUPILS AT WORK IN THE GARDEN.

Mersey Basin Week began as a two-day event around 15 years ago as a way to get people involved in practical activities around the waterways of the Mersey and the Ribble.

Since then it has grown massively, and last year 5,000 people took part in almost 300 events over ten days. Events take place across Merseyside, Lancashire, Greater Manchester and Cheshire.

The Week makes hundreds of small grants of under £100 to get local people involved in a range of events from cleanups to guided walks, and wildlife surveys to arts and crafts projects. It is sponsored by Viridor Laing.

This year's event takes place from Friday 2 to Sunday 11 October.

To get involved contact Bev Mitchell on 0161 242 8212 or email b.mitchell@merseybasin.org.uk

WILD MERSEY

Wildlife is thriving in the Mersey's rich and varied habitats.

Words Chris Baines Photographs Colin McPherson, Steve Young

Heart of the Mersey

Nature lies at the very heart of the River Mersey. The rhythmic rise and fall of the tide exposes miles of mud and sand, making the Mersey estuary one of the richest feeding grounds in Europe for a host of migratory ducks, geese and wading birds. If this were the region's only habitat, its international designation as a Specially Protected Area would still be justified. In fact, the Mersey and the many miles of streams and rivers that feed it make up a remarkable mosaic of different habitats. The tidal estuary may offer the most dramatic natural spectacle but there is a wealth of more modest wildlife to be found in landscapes as varied as the moorland of the high Pennines, the rich farmland of the lowland plain and the green spaces of the inner city.

The hills to the east

The Mersey is a relatively short river. Its source is less than 70 miles from the sea, but it rises in surroundings that could hardly be more different from the grand Victorian docks and civic buildings of the port of Liverpool. The river is born in a wild and windswept landscape of heather moorland, haunted by the rippling cries of curlew and the indignant "go-back, go-back, go-back" of red grouse. This is nesting territory for birds such as golden plover, oystercatcher and redshank, where blankets of sphagnum moss soak up the rain, build up the peat and offer a toehold for wild plants such as cotton grass, sundew and bilberry.

Recovery of a working river

The streams of the Mersey's gathering grounds would once have flowed down from the moors to pass through unpolluted countryside all the way to the Irish Sea, but for most of the last 200 years that link has been badly damaged. Industry and housing was built over the open countryside and changed the landscape forever. But it was pollution that finally wiped out most of the wildlife. From the early 19th century onwards, the lowland stretches of the river were poisoned by sewage and industrial effluent and, as a consequence, the Mersey almost died. In parts its fish life disappeared completely, and even as recently as the late 1980s the soap suds of Warrington's Howley Weir continued to advertise the poisoned state of the river. In those days the Mersey was thought to be the most polluted estuary in Europe.

REDSHANK, BY STEVE YOUNG

More recently the quality of the Mersey has improved miraculously, until now about 50 different fish species can be found once more. Many of them may only be occasional visitors – and the impressive swordfish that now resides in a Liverpool museum was probably a one-off – but there are at least ten fish species that have firmly re-established themselves in the river and its estuary.

The Atlantic salmon is undoubtedly the greatest symbol of success. Two centuries ago, wild Mersey salmon was a staple diet in the region's workhouses – so common that the parish poor complained. With the coming of the industrial revolution, this sensitive species disappeared completely, but now it has returned as living proof of the Mersey's clean up.

Even so, there are still some serious problems for the Mersey's fish. A relatively recent problem is the complex chemicals found in a range of household and industrial products that act as 'endocrine disrupters' – chemicals known to stimulate gender change in some fish. By contrast the pesticide DDT is a much older pollution problem. It was first manufactured on the banks of the Mersey in the 1940s and even though its use has been banned for years, disturbance of the mud in which it lies can still cause serious problems. However, although it may be difficult to see the shoals of fish that are now swimming beneath the surface, the growing numbers of kingfishers and cormorants, otters and grey seals are visible proof that the river is on the mend.

An urban mosaic

Long stretches of the Mersey flow through a crowded urban landscape. Nevertheless, anyone flying overhead can look down on an almost seamless canopy of trees and greenery – a living tapestry of parks, tree lined avenues, school grounds and cemeteries. There are also nearly a million private gardens here and many of them have garden ponds, flower borders, bird feeders and nesting boxes. These garden glades within the shelter of the urban forest are becoming the habitat of choice for many woodland bird species as well as hedgehogs, squirrels, toads and foxes.

The natural streams and smaller rivers have always helped to weave the landscape together, but two and a half centuries of industrialisation have added other ecological corridors to the network. The first commercial canal in the country was constructed here, along the Sankey valley, back in 1757. An entire network of canals soon followed. The anglers who line the canal banks are testament to the fish life living in these man-made waterways, as are the kingfishers and herons. Miles of traffic free towpaths offer easy access to an abundance of colourful wild plants and animals.

By comparison the railway corridors are relatively inaccessible. The passing trains cause little real disturbance and, as a consequence, railway cuttings and embankments function as linear wildlife sanctuaries. The foxes that raid the bins by night, the hedgehogs that feed among the flowerbeds and the colourful butterflies that sip nectar from back garden buddleia bushes – these species and many more breed in the relative seclusion of wild railway land.

Grand public parks are another important feature of the urban landscape close by the Mersey. Many of them have ornamental lakes as well as sweeping lawns, flowerbeds and shrubberies, and they are especially valuable for wildlife because of their big trees. They have become a stronghold for such species as the nuthatch, tawny owl and tree creeper. There are woodpeckers and sparrow hawks thriving here as well as such familiar woodland birds as thrushes, robins, tits, blackbirds and wrens. Some of the older parks have good populations of wild mushrooms in the autumn, as well as butterflies and beetles, and popular creatures such as squirrels, bats and hedgehogs.

Where park keepers make space for dead wood, fallen leaves and wildflowers, public parks offer a real countryside experience for people living in the heart of town – and this idea was invented on Merseyside. Birkenhead Park is world renowned as the inspiration for New York's Central Park and there are hundreds of towns and cities all around the world that can trace the origins of their local "breathing place" back to its roots beside the Mersey.

[CONTINUED OVER]

A world class wetland

Dumping untreated sewage into a river uses up the oxygen in the water, so as the region's human population grew, the wildlife living in the lower reaches of the river began to suffocate. However, thanks to a massive amount of investment in new sewerage treatment works, the tidal estuary is once more the natural crowning glory of the Mersey. It serves as a nursery for the fish of the North Atlantic and a terminus for enormous numbers of migratory wild birds.

The Mersey estuary's particular ecological importance lies in the huge rise and fall of the tides – the second largest in the world. Vast sandbanks and tidal mudflats are covered, uncovered and re-covered twice each day and the hidden wildlife living within provides the food supply for many other more spectacular creatures. A walk across the sand and mud at low tide reveals millions of clues to the wild wealth that is living down below. Mud dwellers such as lugworms and cockles produce telltale tunnels and waste heaps, but it is the wild birds that really give the game away. Keen birdwatcher Colin Wells has been monitoring bird life on the Rivers Dee and Mersey since the 1980s, and he regards the recovery of shelduck numbers as particularly significant. These handsome birds patrol the Mersey's wettest, softest mud, sweeping their bills from side to side, harvesting the microscopic snails that live there. These tiny snails are extremely sensitive to chemical pollution but they have responded very positively to the Mersey clean up. Now, one in five of the UK's shelducks – a staggering 19,000 birds – spends the summer months around the Mersey.

The numbers of wading birds are every bit as impressive. Half the UK population of dunlin – 40,000 modest looking little brown birds – winter here, along with similar numbers of knot. These birds feed in large flocks that constantly chase the water's edge, and one of the Mersey's most entrancing wildlife spectacles is the sight of clouds of these birds, flying in perfectly synchronised formation back and forth over the shallows of a changing tide.

Individually, oystercatchers are much more striking to look at, with black and white plumage and carrot-orange beaks and legs. Their principal food is cockles, and an oystercatcher's long straight beak is well suited to plunging deep into the mud to dig them out. These birds are also commonly seen in twos and threes, probing for earthworms on the ornamental lawns, golf links and playing fields of Merseyside.

Apart from the grey heron, curlews are the largest of the estuary's wading birds. They have mottled brown plumage, long legs and a distinctive downward curving beak that is ideally adapted for extracting juicy lugworms from deep in the mud. When spring comes, these birds of the winter shoreline fly back to the hills to breed – an annual to-ing and fro-ing along the length of the River Mersey that must have been a feature of the region for thousands of years.

On a typical winter's day there may be as many as 100,000 individual waders feeding on the mudflats and beaches of the Mersey estuary. There are many more that touch down for a few days of refuelling on their journeys between summer breeding grounds in the arctic and winter feeding grounds as far south as the coast of sub-Saharan Africa. They share their tidal habitat with wintering ducks and swans and geese and, all in all, the bird life of the Mersey estuary is as grand a wildlife spectacle as any in the British Isles. This is officially one of Britain's top ten wetland sites.

Colin Wells admits that it is difficult to get close to the most impressive of the Mersey estuary's wild birds, since so many of the richest low tide feeding areas are such a long way from shore. The development of webcam and closed circuit TV technology is making it easier to show many more people just how much spectacular bird life there is on the Mersey estuary's far horizons. However, as Colin says, nothing quite compares with the thrill of watching wild birds at first hand, with the wind in your face and your feet in the mud.

Story of the Mersey salmon

"At times the river literally teemed with fish, so plentiful that, after human needs were met, pigs were fed with salmon, and herrings were used to manure the fields."

History of Garston and its Church, by Reverend J. M Swift,

"On the Mersey was formerly a valuable fishery, which in 1763, was let for £400 per annum; it abounded with salmon and smelts of a very superior kind, but has now greatly declined, not only in the quantity, but also in the size and flavour, of the fish."

A Topographical Dictionary of England, by Samuel Lewis, 1840.

Pollution from the industrial revolution ruined the Mersey as a salmon river, and by the 1960s the Mersey estuary was virtually lifeless.

Following a massive clean up, in 1999 salmon were spotted in one of the Mersey's tributaries for the first time in living memory. In 2001, three were caught and measured at Woolston weir near Warrington. Then in 2005, young salmon were found in the headwaters of the River Goyt, proving they were again breeding in the Mersey system.

ABOVE: **SALMON PARR FOUND IN THE RIVER GOYT, SUMMER 2005**
BELOW: **MERSEY SALMON**
COURTESY OF THE ENVIRONMENT AGENCY

CURLEW, BY STEVE YOUNG

"There is a wealth of wildlife in landscapes as varied as the moorland of the high Pennines, the rich farmland of the lowland plain and the green spaces of the inner city."

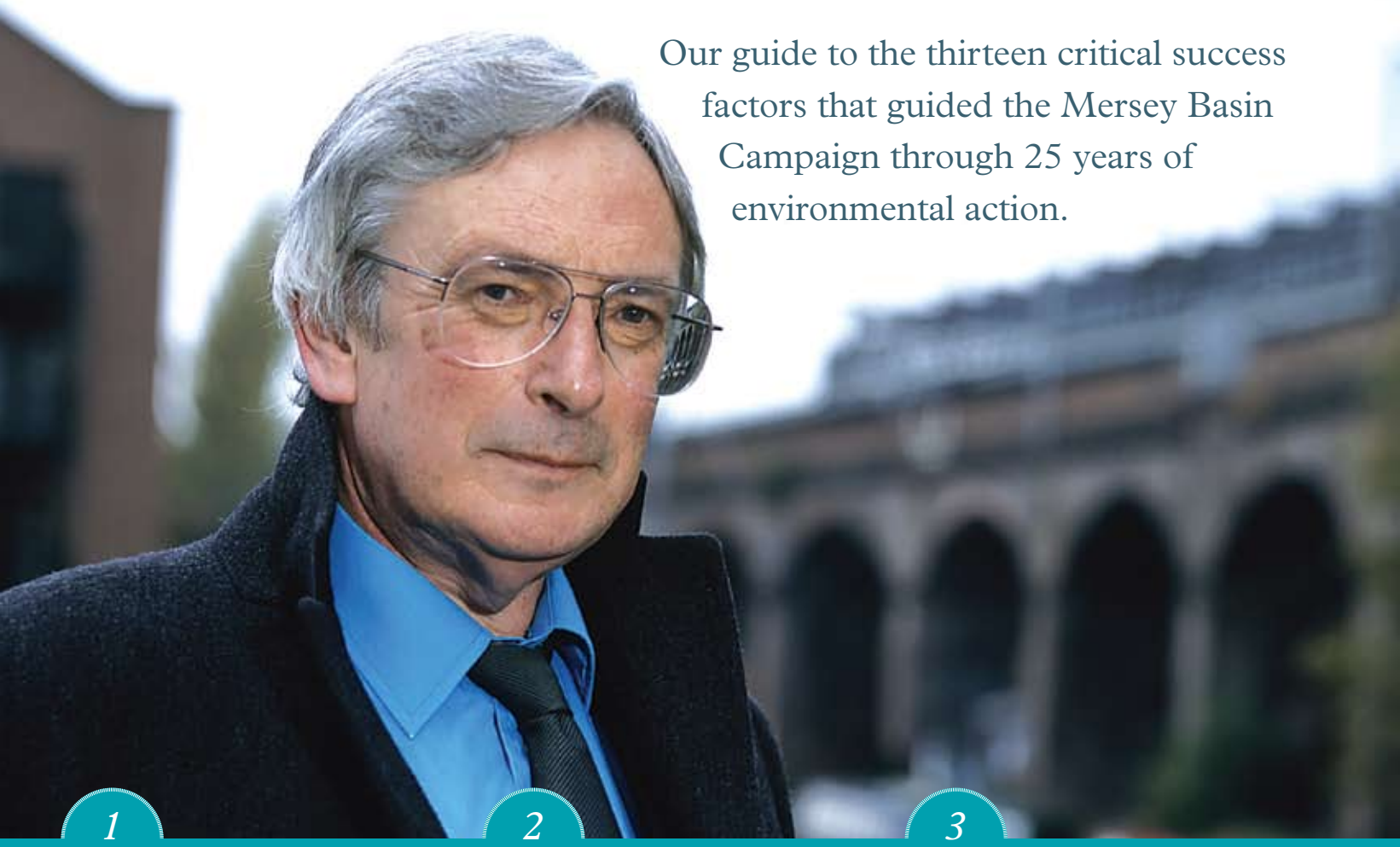
A model for sustainable urban living

Urban living can all too easily put nature out of sight and out of mind, and yet we all depend on natural life support systems for our survival. Already more than half the people on Earth are living in cities, and the proportion is rising rapidly. We need to make space for nature close to home and the five million people who live near the Mersey and its tributaries have an enviable head start. For more than two centuries this region has been exploiting nature – making it work for people – but in recent years that relationship has been reversed, and now wildlife is making a welcome comeback, thanks to human ingenuity and intervention. That is good news for the region's birds and fish and wildflowers – but it also very good news for the millions of people who live and work beside the River Mersey.

RIGHT: **COMMON POTTED ORCHIDS**

THIRTEEN FROM

Our guide to the thirteen critical success factors that guided the Mersey Basin Campaign through 25 years of environmental action.



1

LEADERSHIP

Leadership emerges in many different places – in community groups as well as at the head of powerful public and private sector organisations. Some leaders are elected. Others are appointed or self-appointed. Successful partnerships need strong leadership.

BELOW: **It was government minister Michael Heseltine's leadership following the Toxteth Riots in 1981 that led directly to the creation of the Mersey Basin Campaign.**

2

VISION

It is easy to be overwhelmed by conflicting ideas, information and distractions. 'Mission drift' is a constant threat. So the vision must be clear and unshakeable. Our vision is one of waters clean enough for fish to live in, flowing through green or appropriately developed watersides. The focus of the Mersey Basin Campaign throughout its entire life has been on improving the waters and watersides of our river system by engaging organisations and individuals in the process.

BELOW: **Cleaner water made possible the superb regeneration of Salford Quays.**

3

PEOPLE ARE MORE IMPORTANT THAN STRUCTURES

People are more important than organisational structures. Progress is more important than process. Positive change on the ground is more important than strategy. Despite constipated systems and the dangers of strangulation by process and targets, good people can achieve remarkable things.

BELOW: **2008 Unilever Dragonfly Award Winner Amy Preston, an inspiring schoolgirl volunteer.**

TWENTY-FIVE

Words

Walter Menzies, chief executive,

Mersey Basin Campaign

[PICTURED LEFT]

4

THE BIG IDEA

The big idea is sustainable development: progress that recognises that the environment, the economy and social conditions are inextricably linked. Sending the bill to future generations is wrong. The Campaign has avoided being sidelined as a single-issue organisation by working across the sectors and viewing all of them – including business – as part of the solution rather than part of the problem.

ABOVE: **Sustainable development in action: the Manchester headquarters of architects BDP has impressive environmental standards. The development won a Northwest Business Environment Award, organised by the Mersey Basin Campaign – one of the ways the Campaign engages with business.**

5

REALISTIC TIMESCALE

Ecological time, community time and political time are rarely synchronised. Short-term, quick fix political initiatives come and go and are soon forgotten. They are not the answer to big, long-term problems. The Campaign's lifespan of 25 years was quite exceptional for a government-backed initiative – and about right.

ABOVE: **The Mersey is attracting new development – but it took 25 years for the political, environmental and economic timescales to bear fruit.**

6

GOVERNMENT BACKING

Successive governments, both Conservative and Labour, have backed the Mersey Basin Campaign and provided essential core funding around which additional resources have been packaged. The government also appoints the Campaign's chair, which confers status upon the role. This relationship with the government reassures business partners and sponsors that the Campaign is a serious force.

ABOVE: **Environment Minister Hilary Benn, a contributor to the Campaign's Environment 09 Conference.** Photo by Steve Punter.

"People are more important than organisational structures.
Progress is more important than process.
Positive change on the ground is more important than strategy."

7

RESOURCES

The scale of investment in water quality improvements in Northwest England has been massive in comparison with investment in other types of infrastructure. Since privatisation in 1989, the capital investment by the region's water company, United Utilities, has been around £8 billion. The economic regulator OFWAT determines the level of investment. Alongside the Environment Agency's environmental regulation, this investment has made a massive impact: shockingly polluted waters have been transformed and wildlife has returned.

ABOVE: **Engineers inspecting the 134km Thirlmere Aqueduct – part of an eight year, £350 million programme by United Utilities.**

8

ACTION AT EVERY LEVEL

We have understood the importance of both strategy and delivery and the weakness of one without the other. Action has been needed at every level. The Campaign was the inaugural winner of the World Riverprize, cementing our reputation as an international leader. This has been helpful. And it has been good for our region to have an outstanding environmental success story.

Europe has been the originator of important environmental directives and of valuable funding and partnerships: through our participation in transnational programmes we have learned from our European colleagues and they have learned from us. We have been active too in influencing policy and decisions nationally and at the level of the Northwest region.

At the community level the Campaign's network of local action partnerships has been led by people with local knowledge and commitment. This has guided our action partnership coordinators in delivering real change on the ground.

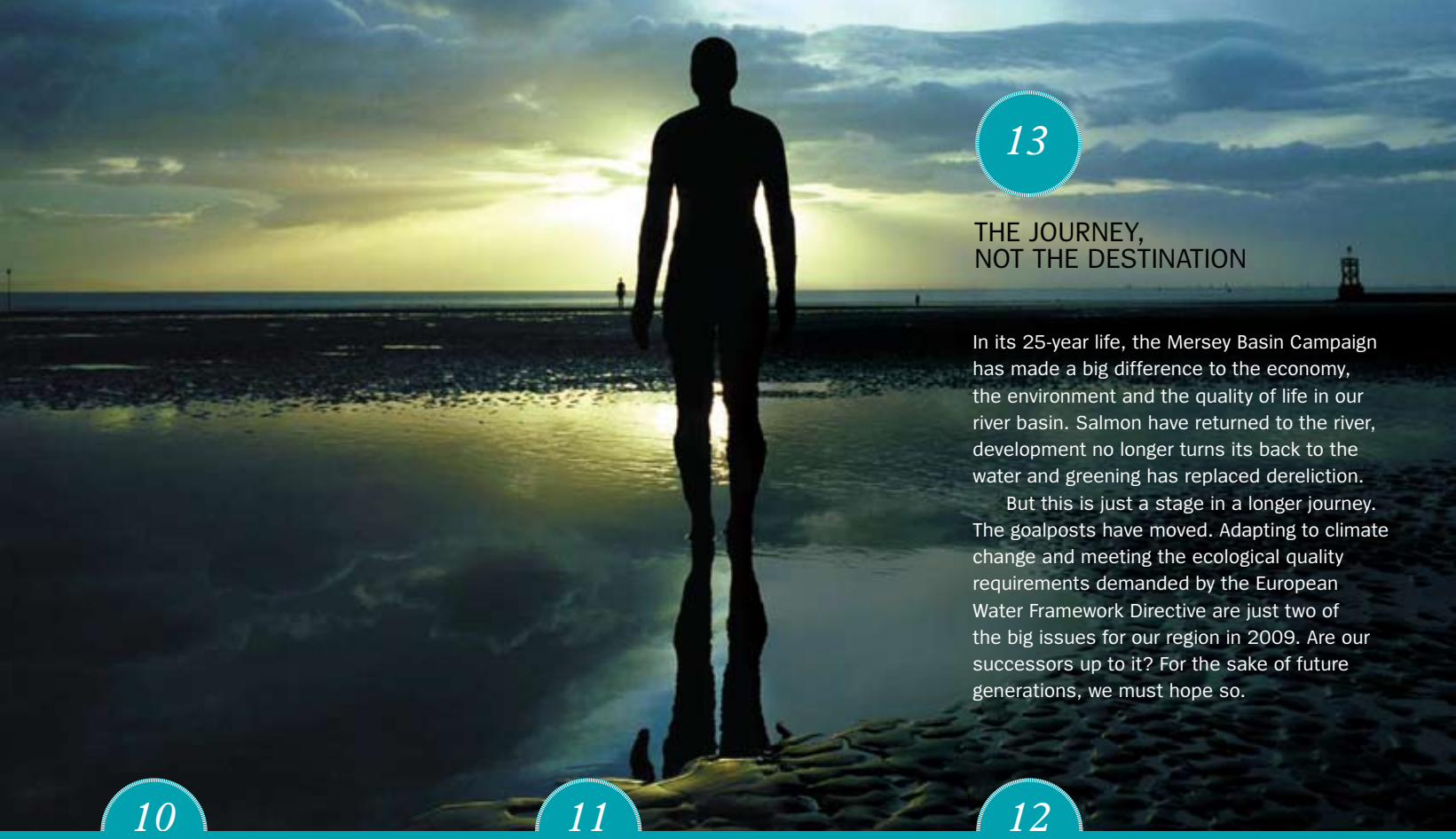
ABOVE: **Volunteers building an otter holt in Cheshire.**

9

WAYS OF WORKING

The Campaign has no power and very limited resources. We are not a regulator and we are driven not by profit, but by our mission. We have sought to lead massive change and to exercise influence far beyond our authority. So we have worked in very different ways – by influencing opinion and priorities among stakeholders, politicians, government officials, the business community and local people; by enabling projects to be delivered by the Campaign itself and its many partners; by enhancing the work of partners by raising their aspirations towards higher quality outcomes; and by communicating appropriately with different audiences.

ABOVE: **Delegates networking at one of the Campaign's popular forums.**



13

THE JOURNEY, NOT THE DESTINATION

In its 25-year life, the Mersey Basin Campaign has made a big difference to the economy, the environment and the quality of life in our river basin. Salmon have returned to the river, development no longer turns its back to the water and greening has replaced dereliction.

But this is just a stage in a longer journey. The goalposts have moved. Adapting to climate change and meeting the ecological quality requirements demanded by the European Water Framework Directive are just two of the big issues for our region in 2009. Are our successors up to it? For the sake of future generations, we must hope so.

10

PROFESSIONALISM

Aiming for the highest common factor rather than the lowest common denominator demands confidence and professionalism. In projects, events and communications, we aspire to excellence.

BELOW: **The Campaign's Source magazine has achieved high standards in content and design.**

11

COMMUNICATIONS

It is no good being correct, worthy, dull and ignored. We live and work in a communications ecosystem of many voices and many media. Communications are at the heart of everything the Campaign has attempted. We have a carefully targeted communications strategy that is regularly refreshed. We have achieved very big impact with minimal resources. From face to face forums through to state of the art social media, we have constantly pushed the communications boundaries.

BELOW: **Sammy the celebrity Salmon, worldwide blogger, with the Lord Mayor of Liverpool.**

12

PARTNERSHIP

Partnership has become an aerosol word – sprayed on everything – at least in the world of regeneration in which the Campaign is a player. Its meaning has become devalued. But the silos within government, along with misconceptions and mistrust between the public, private, voluntary, community and academic sectors, remain serious barriers to progress. The Campaign has been a pioneer of ambitious partnership working across these sectors. By attacking stereotypes, breaking down barriers and creating new alliances, more has been achieved with less.

BELOW: **Speke Garston Coastal reserve, the largest area of new open space in Liverpool for 100 years, made possible by the Campaign's partnership with developer Peel Holdings and voluntary group Liverpool Sailing Club.**

Peter Batey is Lever Professor of Town and Regional Planning at the University of Liverpool and chair of the Mersey Basin Campaign.

Comment:

There may be no more Mersey Basin Campaign after 2010, but part of its legacy should be the innovative geographical notion on which it was founded.

By Professor Peter Batey

In public affairs, the idea of 'city-regions' is gaining ground. The recent decision to make Greater Manchester a pilot city-region signals the government's belief in them as a workable form of governance.

Some of the main arguments in their favour rest on geography: a city-region is a better reflection of the 'geography of everyday life' than any of the alternatives. It takes into account commuting patterns, local housing markets and shopping habits, yet offers sufficient perspective when it comes to economic development, transport, skills, regeneration and strategic planning. Entire regions – say, the whole Northwest – are too large and remote, while local authority boundaries are often arbitrary and reflect history rather than present reality. Geography was no less important 25 years ago, when the Mersey Basin Campaign was created to help clean up the River Mersey. City-regions were going out of favour then as the government of the day had decided to abolish the metropolitan counties, Greater Manchester among them. This made the decision about the geographical area of the Campaign all the more significant.

In the event, the area selected was the river basin, 'the portion of land drained by the river and its tributaries.' The Mersey basin is a large, densely populated industrial area, covering two city-regions, Liverpool and Manchester. Problems of water pollution were created and shared within the river basin and it made good sense to think of solutions that would apply across the whole basin. Not a new idea – the Tennessee Valley is the most famous precedent – but a wise one in the circumstances.

There is certainly room for this idea in today's world. For the first time, an integrated regional strategy that will guide planning and government spending in the Northwest for the next 20 years is being prepared, and the corridor between Liverpool and Manchester is being considered as one of its main spatial proposals, currently promoted as the Atlantic Gateway.

The scale of this development extends far beyond one city-region, and Liverpool and Manchester are usually rivals at best. But an integrated strategy demands that we find ways to think of our city-regions together, not as semi-autonomous entities. It is the Mersey that naturally links Liverpool, Manchester and the towns between and beyond – a river basin perspective starts to look increasingly attractive.

Comment:

The Mersey faces a future as a second-class river.

By Dr Keith Hendry

The clean up of the River Mersey over the past 25 years has been nothing short of magnificent. But are we prepared to build on that success, recognising in particular that environmental improvement helps to drive economic prosperity?

The much needed focus on cleaning up the water in our rivers – and the billions of pounds spent to achieve this – has unwittingly revealed the parlous state of the habitats beneath and beside the water.

In an attempt to tame our rivers they have been straightened and deepened on a massive scale over hundreds of years, and in many cases forced into pipes underground and built over. What today would be considered deliberate over-engineering was the way things were done at the time. In many other instances what we see is pure neglect and wilful abuse.
The results are rivers constrained within concrete walls, and riverbeds made of discarded bricks.

These are problems that can be fixed and would matter less if were not for our potentially calamitous failure to embrace the opportunities presented by the newly enacted Water Framework Directive.

The Directive represents landmark European legislation designed to promote economic development via environmental improvement across Europe. It attempts to ensure that the quality of the local environment cannot be a hindrance to economic development and prosperity.

Unfortunately, the Northwest – and the Mersey in particular – has more than it's fair share of waterways classed as 'heavily modified' or 'artificial habitats', for which the Directive's ecological targets are lower.

By accepting these lower standards instead of aiming higher, we are in essence deliberately allowing the improvement of our rivers to slip behind the rest of the UK and Europe. This means that in decades to come we can expect a lower level of economic development in the Northwest compared to our neighbours.

So it seems that having come so far and achieved so much, the Mersey may now face a future as a second-class river. The failure to seize the legislative opportunity presented to us means that future improvements are unlikely to match the spectacular successes we've seen so far, and our economy will suffer accordingly.

Dr Keith Hendry is a scientist and managing director of aquatic consultants APEM Ltd.

Comment:

Industrialisation led to climate change, now it's up to scientists, engineers and entrepreneurs to limit its impact.

By Professor Sir David King

The world has never before been faced with a challenge of the magnitude of climate change. Industrialisation provided unimaginable benefits but has also put enormous pressure on the planet because of the population increase it brought about, leaving us with huge problems.

We can do nothing to halt changes to the climate over the next 30 years because of the time lag in the climate system. But there is much we can do to limit climate change beyond 2040 and we must use the expertise of our scientists, our engineers and our entrepreneurs to do that.

Population

The world's population is likely to reach nine billion by 2050. Population growth is slowing as more girls and women in the developing world have access to education and become empowered, and families become smaller as a result.

But development in Africa is still being held back. Poor approaches to African development by the North, and weak and corrupt governments in some countries, have kept millions of people in poverty. Diseases such as HIV Aids, malaria and TB are still rife in many parts of the continent, while too little use is being made of the scientific and technological advances that could increase crop yields and hasten the use of low carbon energy sources.

For example, many African communities depend on fishing so are being badly harmed by the worldwide over-exploitation of the seas. Over-fishing is now affecting almost 90 per cent of the world's oceans yet we seem incapable of doing anything to stop that, despite having the very best scientific advice.

This is symptomatic of the growing impotence of global governing bodies. The UN is no longer fit to manage our seas and neither is it fit to enforce meaningful action to tackle climate change. We need a new form of governance – one that all countries respect and comply with.

Obama

In July, the Obama administration welcomed Chinese Vice Premier Wang Qishan for wide-ranging talks including discussions on climate change and renewable energy. These were hugely important negotiations because these two countries can do more than any others to guarantee a safe, sustainable and prosperous future for our planet.

Steven Chu, the US energy secretary, said after the meeting that clean energy and climate change would be critical to the US-China relationship. A lot depends on it. Agreement by these two countries to act both nationally and internationally is paramount if much of the globe is to follow suit.

Britain is amongst exceptions to this rule and last year's groundbreaking legislation on emissions cuts is an example that other countries could and should follow.

Smith School

The Northwest is in a plum position to contribute to and benefit from efforts to tackle climate change, with the Northwest Regional Development Agency the lead agency for the Department of Energy and Climate Change. The considerable potential for wind and tidal energy in the region makes it ideal for businesses keen to seize the opportunities climate change is presenting. And what a timely development that would be as Liverpool celebrates its Year of the Environment.

The Smith School of Enterprise and the Environment in Oxford is working with both industry and governments partly to encourage companies of all sizes to take this sort of initiative. We have just published research showing that businesses that cut emissions can cut their costs and improve their reputations as well.

The American car firm GM is an obvious example of a company that ignored the innovative opportunities provided by the move to low carbon economies, and now has gone bust. Rather than accepting that low emission vehicles were the only viable future for carmakers, GM stuck its head in the sand and instead persisted with the development of the commercial Humvee, one of the world's most polluting cars.

Tackling climate change is the most serious challenge the world has ever faced. It is a challenge created by industrialisation – a revolution from which the Northwest greatly benefited. Now, the new, green industrial revolution we must all embrace is opening the door to another enlightened transformation.

And where the Northwest goes, others will follow. From Washington, to Beijing to the emerging economies of Africa.

Professor Sir David King was the government's chief scientific advisor from 2000–2007. He is currently director of the Smith School of Enterprise and Environment at the University of Oxford. He co-authored a book about climate change, *The Hot Topic*, published last year.

Along its entire 70-mile length from Stockport to Manchester, the River Mersey is cleaner today than at any time since the industrial revolution.

After 25 years working to clean up the river and encourage economic regeneration beside it, the Mersey Basin Campaign will end next year.

We want to thank all the many people from business, sponsors, government, local authorities, universities and voluntary and community groups who helped in the clean up.

You made the transformation of the River Mersey one of the world's environmental triumphs.