

WATERWORKS

Overcoming challenges to achieving good water status in urban areas

24th - 25th May 2016,
Manchester, UK

Summary Report

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The organisers of the Manchester Water Platform Meeting would like to acknowledge the contributors to the event:

- *Mr Ed Clegg, Ms Claire Ziadi, Ms Helen Dix and Ms Anna Bond, The Environment Agency;*
- *Alistair Maltby (Rivers Trust);*
- *Caroline Riley (Healthy Waterways Trust);*
- *Neemo Communications Team;*
- *Thank you to the LIFE project representatives and all delegates who attended.*

1 Introduction

The 2016 Water Platform Meeting ‘*WATER WORKS - overcoming challenges to achieving good water status in urban areas,*’ was held in Manchester in the North West of England on the 24th and 25th of May 2016. The North West of England is the location of the UK’s first Integrated Project (IP) co-financed by the LIFE programme and one of three water related IPs in Europe co-financed by the EU in 2015: *LIFE-IP Natural Source - Integrated water management approach to delivery of the North West England River basin management plan (LIFE14 IPE/UK/000027)*. The purpose of the platform meeting was to identify the drivers, barriers and innovations in achieving ‘good water status’ in accordance with the Water Framework Directive (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000) throughout Europe.

The event was hosted by the IP’s Coordinating Beneficiary, the Environment Agency on behalf of the LIFE programme. The North West has a strong industrial heritage, coupled with substantial programmes of regeneration and population pressures and has, in recent years, been subject to severe flood events. It was therefore considered the ideal location to both implement the water-based IP in the UK and to show-case examples of innovations and best practice in the field of water resource and quality management in urban areas.

Just over 100 delegates attended the platform meeting from across 13 member states and representing 43 LIFE-funded projects that provide innovations in sustainable water use, water quality treatment, river-basin management and hydromorphological improvements. Support was provided from all the UK IP beneficiaries and guests representing Defra, JNCC, the LIFE unit, EASME, Ecorys, Nation Union of Farmers and the Rivers Trusts. The event had the privilege of being attended by Rory Stewart OBE MP FRSL, Parliamentary Under Secretary of State for Environment and Rural Affairs, and Claire McCamphill of the EC DG ENV Water Policy Unit, who were kind enough to provide inspirational and informative keynote speeches. The meeting was opened and closed by Hervé Martin, Head of the LIFE unit, whose presence throughout the meeting was much appreciated by delegates and organisers alike.

The platform meeting comprised a number of keynote speeches, identifying the issues, policy drivers, barriers and strategies to achieving good water status, and presentations from successful LIFE projects in the fields of alleviation of hydrological barriers, water quality and emerging pollutants, and sustainable water use. Over 20 posters were presented during the course of the meeting which showed the breadth and scope of the LIFE project work. The posters stimulated discussion during the networking sessions and formed the basis of our knowledge market. Workshop sessions were completed on the second day, with dedicated presentations for each thematic stream followed by discussion and feedback on the key barriers, solutions and policy needs for achieving good water status. Field visits were conducted on Day 1 representing the 3 themes and included guided visits to the River Medlock; regeneration areas in Salford Quays and Rochdale town centre; United Utilities Daveyhulme waste water treatment works and sustainable buildings at Manchester Metropolitan University. A guided visit by The Ribble Rivers Trust was also provided for all delegates on Day 2 to rural areas of the River Loud Catchment to illustrate the successful application of ecological and hydromorphological improvements and farmer engagement.

2 Background

In 2012 the European Commission published ‘A Blueprint to Safeguard Europe’s Water Resources’¹ a strategic document which aimed to tackle the obstacles which hamper action to safeguard Europe’s water resources. The report emphasised key themes which included improving land use, addressing water pollution, increasing water efficiency and resilience, and improving governance by those involved in managing water resources.

The project-based approach of the EU LIFE programme has proved a good fit with water policy and the Blueprint, providing practical examples of sustainable and equitable ways of using water².

Key issues identified in urban settings are:

- Hydromorphological pressures and alleviation of physical barriers (navigation, hydropower, flood defences). The platform meeting examined the problems of reconnecting rivers to their flood plains, which are particularly acute in urban areas, and discussed some of the potential solutions being developed by the LIFE projects.
- Chemical status and pollution of water bodies remains an issue in Europe. LIFE projects are often at the forefront of water treatment, developing new technologies to address existing (priority substances) and emerging problems (such as pharmaceuticals) in surface and groundwater. Chemical contamination from diffuse sources in urban areas was highlighted with some innovative thinking on SUDS (sustainable urban drainage systems).
- Sustainable use of Europe’s waters, especially in its quantitative aspects, is a real challenge for water managers; water scarcity is not exclusive to southern European states. Some LIFE projects present at the platform meeting demonstrated efficient use of water (industry, buildings, distribution networks, energy production) with a special emphasis on water re-use for industry.

The three themes selected for the Water Platform Meeting were specifically chosen to provide as much information as possible about LIFE projects contributing to these particularly difficulty difficult areas of water management.

The presentations, posters and workshop materials are being uploaded to a document sharing area that can be accessed by all the participants.

¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52012DC0673>

² http://ec.europa.eu/environment/life/publications/lifepublications/lifefocus/documents/blueprint_water.pdf

3 Sessions

3.1 24th May 2016 – Morning Session

3.1.1 Presentation summaries

Donald Lunan of NEEMO made the first introductions at the platform meeting and set the scene for the challenges of meeting the WFD requirements at the EU Level. He was followed by Hervé Martin, Head of LIFE Environment Unit, who gave the opening address and welcomed the delegates to the meeting. Session 1 featured a keynote speech on the WFD challenges in the urban environment (Claire McCamphill, EU Water Policy Unit, DG ENV), and presentations from two LIFE projects on topics of innovative solutions and water efficiency. Rory Stewart OBE MP FRSL Parliamentary Under Secretary of State for Environment and Rural Affairs gave the 2nd keynote speech of the day on the approach and ambition of England's water environment. Keith Ashcroft of the Environment Agency presented a journey of water in the North West of the England and Alistair Maltby of the Rivers Trust presented LIFE project experiences of integrated water resources management.

There follows a summary of the main presentations.

Claire McCamphill	Keynote Speech: WFD Challenges in the Urban Environment
<p>Two major pressures common across all EU member states are diffuse sources of pollution leading to nutrient enrichment and hydromorphological pressures causing TK habitats and flows. There is also an emerging trend of water scarcity, especially for the Mediterranean region.</p> <p>One key question raised was - is the 53% target for good status achievable? And if it is, meaning we have half of EU waters at good status, then how do we ensure this is sustained whilst maintaining economic growth and quality of life for people. Some of the biggest barriers and issues that we see in implementing good water quality is establishing the correct governance arrangements. For a long time water policy was the domain of people who were interested in water policy, it now needs to be expanded to other sectors: making people who know nothing about the WFD actually care about it.</p> <p>It is also essential to have effective governance, whereby cross-agency funding mechanisms can be aligned to deliver win-wins. For example, the UK IP focuses on natural flood management. How do you use land management to better store water and then how do you use that as a filtration process to reduce the impact on downstream communities and improve the ecology of the river? In times of constricted national budgets how do you accommodate these two processes side by side? LIFE Projects can help to build the evidence base to show that working with nature can deliver multiple benefits, which in turn can influence decision makers.</p> <p>The water platform meeting will address three issues which are very important for the Water Framework Directive:</p> <ol style="list-style-type: none">1) Physical barriers e.g. navigation, dredging, draining, canalising. How can these systems be reengineered to allow for a healthy environment?2) Chemical status.3) Availability and use of water. <p>I want to see the LIFE Integrated Projects deliver a step change in water management, and that the learning from this can be spread to other regions of the MS and the rest of the EU. It should absolutely not be business as usual, it should be aiming for the ethos of the Directive and aligning as many people as possible to deliver an ambitious vision.</p>	
Project	EU Water Policy Unit, DG ENV

Howard Dryden	Innovative filtration media and commercial success after LIFE
About the Project	
<p>The overall objectives of the project are:</p> <ul style="list-style-type: none"> • The mass production of a high value product from waste glass, to provide an improved filtration system for municipal drinking water supplies. • The protection of public health through improvement of drinking water quality. • A reduction in the environmental impact of waste water from industrial and sewerage water discharge. <p>Specific project objectives are:</p> <ul style="list-style-type: none"> • To confirm that the advanced filtration medium meets Drinking Water Inspectorate Standards. • To establish the first full scale processing facility for AFM. • To establish market acceptance of AFM. 	
Project	LIFE02/ENV/UK/146
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=2079
Project website	http://www.drydenaqua.com/afm/

Geoffrey Saliba ³	How stakeholders can contribute to reducing water consumption in Malta
About the Project	
<p>The main objective of the ‘Investing in Water’ project is to achieve behavioural changes that will lead to increased adoption of best practices for water conservation during the project lifetime among the target economic sectors. The project aims to raise awareness on issues related to the water scarcity problem in Malta, and of the importance of water conservation among the target economic sectors. These will also serve as an example to other sectors to adopt similar measures thereby helping reduce pressure on ground-water resources and contributing towards Malta’s EU obligation to achieve good status under the Water Framework Directive (WFD).</p>	
Project	LIFE10 INF/MT/091 Investing in Water
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4026
Project website	www.investinginwater.org

Rory Stewart OBE	Keynote Speech: The Approach and Ambition of England’s Water Environment
<p>Manchester is the rebirth, the renaissance of a second city. One of the great cities, the founding cornerstones of the industrial revolution, went through a very difficult and challenging period during the 1950s, 1960s, 1970s, 1980s and really has rebuilt itself. And one of the symbols of the rebirth of Manchester is that it has turned back towards its river. Those of you who are football fans will see of course Manchester United station largely faces away from the waterfront, that’s true of much of traditional industrial Britain, but if you look at MediaCity in Salford you suddenly see people beginning to face back towards their water. And the reason why the LIFE IP project is so important for us is that it overcomes a lot of barriers that we have inherited in this country, barriers which really tell us a lot about our history. There are barriers between different government agencies. There are people in this room whose badges will tell you that they are from the Environment Agency or Natural England, from the Forestry Commission or Rivers Trusts or from Manchester council or other council around the 10 councils of the Greater Manchester area or even rural councils.</p> <p>We are learning in a micro level. And Greater Manchester is already showing on a micro level. If you look for example at some of the work that has been done in Salford, looking at how we can use</p>	

³ Note: Mr Saliba was unable to attend on the day but has provided a presentation that is included in the presentations package.

trees to absorb floodwater and absorb contaminants from highways you can see at a small level how this can be done, but this is an opportunity, thanks to the European Commission, to do this at a much bigger level right the way down a huge catchment from the top to the bottom. our relationship to the European Union has allowed us to transform our air quality, our acid rain, our sulphur dioxide, it's improved our nitrogen dioxide levels, our levels of particulate matter and, fundamentally relevant to today, it has had an extraordinary effect on our beaches, on our marine environment, on our fish and now on our river quality. And this drives through to the economic dimension.

Project	MP FRSL Parliamentary Under Secretary of State for Environment and Rural Affairs
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Keith Ashcroft	Water in the North West – A Journey
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One third of the poorest quality rivers in England and Wales are currently found in the North West (England) River Basin District (NW RBD). A range of factors combine in the NW RBD, which create several significant challenges to meeting the requirements of the Water Framework Directive. These factors make the NW RBD an ideal location for implementation of actions to help improve delivery of the Annex VII plan and demonstrate solutions for problems relevant to the rest of the Member State and the European Community. They include:

- High population urban densities in river catchments with low dilution capacity and located at relatively short distances from the sea.
- Wastewater discharges with high phosphorous concentrations resulting in some of the greatest challenges for meeting WFD phosphorous standards in England and Wales.
- Highest trade effluent flows in England and Wales.
- Extensive diffuse pollution issues from agriculture and other un-quantified rural sources.
- Historic (industrial revolution) chemical and metal pollution in river sediments mobilised in high flow conditions, and related high numbers of industrial-age physical modifications.
- Challenges of complying with bathing waters and shellfish water quality standards exacerbated by the second highest rainfall in England and Wales, estuaries with high levels of suspended sediments, and low annual levels of solar radiation.
- Large areas of rivers and estuaries in the NW RBD are designated under the EU Birds Directive and Habitats Directive, and the region contains the largest number of nationally designated areas of increased environmental protection in England requiring more stringent and broader standards than WFD good status alone.
- High level of community deprivation with lowest employment level in England (Office for National Statistics, 2014), and the highest proportion of the most socio-economically deprived communities in England (DCLG, 2010).

In addition to these regional factors, there are a number of national issues from development and delivery of the first cycle river basin plans, which will be addressed in second cycle river basin planning and supported by the IP:

- A need for a greater emphasis on local level planning and action to improve involvement in the planning process as required by Article 14 of the WFD (River basin planning guidance, 2014) and increase affordability of measures.
- Traditional or centrally funded approaches to implementing many measures can be disproportionately costly.
- Certainty on the cause of water body failures needs to be improved to reduce the number of technically infeasible measures.
- The draft updated NW River Basin Management Plan (RBMP) has identified a number of scenarios for the delivery of objectives with the relative costs and benefits compared.

The IP is also set against the industrial back story of the NW of England and the urban heritage of major cities and ports established during the industrial revolution.

Project	LIFE14/UK/IPE/027
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Alastair Maltby	Natural Course: A LIFE integrated project for integrated water management in the North West River Basin District
The overall strategy of this LIFE Integrated Project (IP) is for better implementation of plans under the Water Framework Directive (WFD) by working in a more integrated way with project beneficiaries and stakeholders to address the barriers, gaps and shortcomings preventing achievement of Good Ecological Status (GES). This will catalyse delivery of the IP outcomes that are to improve the trajectory towards GES, increase confidence of meeting targets, and reduce numbers of waterbodies where solutions are considered technically infeasible or proportionately costly.	
Project	LIFE14/UK/IPE/027
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5439

3.2 24th May 2016 – Field Excursion

A total of five field excursions were organised for delegates in and around the Manchester area, summary reports are provided herein.

River Re-naturalisation Field Trip - The River Medlock & Moston Brook

Mark Atherton of AGMA introduced the field excursion, which started with a visit to the LIFE IP project site at Clayton Vale to showcase the work that has been done and is planned to tackle some of our most complex urban pollution issues in partnership. On arrival at the Project Site, Jo Fraser of Manchester City Council gave an overview of the aspirations for the site to deliver more through the partnership project over the next 10 years and explained the successes achieved so far in urban river improvements. The River Medlock re-naturalisation project is a high level restoration scheme that will revive a historically significant but neglected section of the River Medlock in East Manchester. The Environment Agency in partnership with Groundwork and Manchester City Council is leading a series of improvements to the River, reconnecting it with the surrounding community and transforming its value as a natural space. The 2002 Commonwealth Games started the area's transformation from derelict former industrial land to a world class sport and leisure destination; we visited the 'Red River' at Philips Park, one of the world's first municipal parks to see how the industrial age left a lasting legacy on the river; then upstream to Clayton Vale, a former tip where a section of river was restored in 2013-14. Following some refreshments, the group moved to Velopark where Mark shared his vision for LIFE IP in Manchester.



The second part of the trip was led by Ann Bates from Oldham Council at Moston Brook - a heavily urbanised river with a range of water quality issues. Moston Brook is a short tributary of the River Irk. It's a heavily modified water body running through the urban and previously industrialised areas of Oldham and North East Manchester. Oldham and Manchester City Councils are working together on the Moston Brook project to assist with delivery of water quality and green space improvements for people and wildlife. Collaborative working with the Environment Agency, the Irwell Catchment Partnership and other agencies has delivered evidence, feasibility and work and community consultation. Partners are now in the early stages of project delivery including trials of sustainable urban drainage. This site demonstrates how working collaboratively in cities can address complex issues.

Regeneration Field Trip - Daylighting the River in Rochdale Town Centre

The field trip was introduced by Claire Zaidi from the Environment Agency, and started with a visit to Rochdale Town Hall where Gwen Scott (Environment Agency) explained how this project has been completed in partnership and the benefits it has realised for people and the environment. The 'daylighting' project has opened up and restored approx. 60m of the river Roch in Rochdale town centre and exposed a Georgian/Regency 3 arch bridge initially built in the medieval period. The associated public realm works improve the surrounding open space by the use of high quality natural materials and provide an area for the new outdoor

market. The project has been delivered by Rochdale Borough Council and the Environment Agency with external funding contributions from the Heritage Lottery Fund and the Combined Authority (AGMA).

Jon Percival and Francis Comyn from Rochdale Council led the group on a walk down the River Roch to see how the project has opened up a previously culverted river.



Salford Quays Field Trip – Oxygenating the Quays

Caroline Riley from the Healthy Rivers Trust led the excursion, taking delegates on the tram to Media City at Salford Quays, an industrial quayside which has been regenerated to become a thriving destination for business and leisure. Keith Hendry (APEM) explained how problems have been overcome at this large urban regeneration project and was followed by a presentation on the history of the Quays by Will Horsfall (AGMA). Delegates were then taken on a walking tour of the quays to experience how the waterways and surrounding areas have rejuvenated and see demonstrations of some of the technical solutions that have been employed to oxygenate and aerate the water.

Salford Quays is at the head of the Manchester Ship Canal which was once the largest river navigation canal in the world, and Britain's third busiest port was Salford Quays, despite being 64 km inland. The thriving economy at the time of the industrial revolution led to pollution to the waterways by industrial discharges, sewage overflows, and surface water runoff. The Manchester Ship Canal is integral with the River Mersey which was the most polluted river in the UK at that time and includes the River Irwell which forms the headwaters of the Manchester Ship Canal.

To increase oxygen levels in the waters of the Manchester Ship Canal's turning basin near Media City, air is being pumped deep into the water. It allows the fish and many aquatic species to breathe in these waters where, without aeration, they would not survive. The aeration, which began in 2012 as a trial for the ship canal, follows on from over ten years of pumping liquid oxygen into the water.

The decade of oxygenation brought back aquatic life so much that life in the water began to sustain itself without needing pure oxygen.



Davyhulme Wastewater Treatment Works Field Trip

This excursion visited Davyhulme Wastewater Treatment Works, operated by United Utilities who are one of UK's largest private water companies and an associated beneficiary in the IPE. The tour showcased some of the innovative solutions used by United Utilities to meet the past and future environmental commitments for the customers of the Manchester area. Thanks to Simon Boyland and Lee Donnallan of United Utilities for their hospitality on the tour.

Davyhulme is the largest wastewater treatment works at United Utilities with the design capability of treating a population equivalent of 1.2 million in the Manchester area. The site has a rich history of wastewater innovation with Arden and Lockett successfully pioneering the activated sludge treatment process back in 1914, which is now one of the main treatment processes used across the world.

In 2013 the world's most advanced sludge processing centre was built at Davyhulme to recover energy from what was once considered a waste stream. The £100m sludge facility now generates enough renewable electricity to power the entire site and vehicles, with the end product being a clean and valuable soil conditioner that meets modern agricultural

standards. The site has also just commissioned a gas to grid facility, which now provides the capability of exporting the biogas from sludge treatment to the national grid network. United Utilities is currently investing a further £200m at Davyhulme to modernise the wastewater facility with the latest treatment technology that will meet the future environmental commitments for the customers of the Manchester area.



Birley Fields of Manchester Metropolitan University Field Trip – Resource Efficiency in Manchester City Centre

Following introduction by Mark Turner of the Healthy Rivers Trust, the tour was guided by Sophie Leigh and Peter Stringer of Manchester Metropolitan University and Red Rose Forest respectively. This tour focused on the solutions organisations in Manchester have been using to help achieve the aim of becoming a low Carbon Economy.

Manchester Metropolitan University aims to be a sustainable University with a positive environmental impact. Manchester Campus - Birley, opened in September 2014, and is home to the Faculty of Education and the Faculty of Health, Psychology and Social Care. As part of the new campus development, environmental sustainability has been integrated into many aspects of the building design, technology and public realm areas.

The campus is playing a major part in achieving the University's ambition of 'Zero Carbon, Zero Waste and Zero Water' and 'Maximum Biodiversity', and provides real opportunities for community engagement and education.

During a walking tour Peter Stringer explained that Red Rose Forest is an environmental regeneration initiative in Greater Manchester and is one of 12 Community Forests being

developed in England. With the help of many partners, Red Rose Forest is planting 25 million trees over 40 years, to bring the many benefits that well managed trees and woodland can offer to an urban landscape.



3.3 25th May 2016 – Morning Session

Day two of the Water Platform meeting was introduced by Chris People of NEEMO with thoughts on the common issues and solutions encountered in policy and practice. The mornings keynote address was delivered by Jo Harrison, Asset Management Director at United Utilities. She shared her experiences of the private sector approach to water treatment and distribution in the North West of England. Jo demonstrated that the private sector – and therefore private sector funding – had a major role to play not just in water purification and distribution but also in water management. She also pointed out that the private sector is also driven by ensuring that the economics make sense and work for company and local community. Therefore it was important for the company to be embedded in projects like the UK IP – Natural Source, as this provides evidence to the company shareholders that soft engineering and alternative management approaches can deliver on Good Environmental Status, which is a requirement of the regulator.

The main group was then divided into three thematic workgroups; physical pressures, chemical status, and water efficiency. Each workgroup was given presentations from LIFE projects relevant to the thematic area, followed by an interactive discussion session to share and consolidate delegates thoughts and experiences around three common questions applied to each thematic stream. Following a feedback session to the main group on the workgroup

findings, a closing address was delivered by Herve Martin, Head of Environment for the LIFE Unit.

3.3.1 Physical Pressures Workgroup

Rob Collins	The CABA Approach to river basin management
<p>About the Project: The EU Water Framework Directive (WFD) introduced in 2000 imposes firm timetables for reversing the long-term decline in Europe’s freshwater environment. Its headline objective is the achievement of Good Ecological Status (GES) in all European Water Bodies by 2015. Water LIFE aims to move surface water bodies within all demonstration catchments to GES faster than predicted by the 2009 River Basin Management Plans (RBMPs). The project is designed to support governments in the development of 2nd cycle RBMPs, demonstrating that there are civil society and private sector led mechanisms that can work if supported by an adequate policy framework.</p> <p>Presentation Summary:</p> <ul style="list-style-type: none"> • Catchment Based Approach, data-driven approach and tools to convince people, Engaging with farmers and communicate benefits. • Walkover Surveys e.g. River fly initiatives as a citizens science approach as a powerful tool to monitor and assess river conditions and potential pollution, invasive species to develop biosecurity plans. • Engage with community helps to take over responsibility. • Urban pollution: problem of misconnections and diffuse urban runoff. • Thames 21: Spinney: SuDS Park Concept. • Example of RICOH flood risk management. <p>One conclusion: You need a leader to drive initiatives forward and find those people.</p> <p>Questions:</p> <ul style="list-style-type: none"> • How wide spread is the use of citizens' science in other countries? • People that benefits are not usually the people who have the costs e.g. farmers? 	
Project	LIFE13/ENV/UK/497 WaterLIFE
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5009
Project website	http://www.wwf.org.uk/what_we_do/rivers_and_lakes/

Barbara Gruter	Integrated river management in urban areas
<p>About the Project: The project's successfully proved in practice that "multilevel governance" can have great advantages. The project established cooperation routines between national and municipal levels, focusing on environmentally significant dimensions, including river restoration, city planning and local recreation. It successfully proved that if concurrent investment plans at such different levels are jointly coordinated and implemented, a unified and environmentally sustainable river management can be realised. The river bank, broken up in a controlled way, resisted a severe flood (fifty-annual event). 30-40% of the planning and construction time and some 25% of the costs could be saved compared to a conventional project execution.</p> <p>Presentation Summary:</p> <p>WSV – Federal waterways and shipping agency, WSA Stuttgart is responsible for shipping on the river.</p> <ul style="list-style-type: none"> • Barrage: bypass change for fish migration and flood plain creation and restoration of the river banks 	

- Clear division of responsibilities

Questions:

Is the buy in of farm land and land ownership and purchase an issue?

Fish numbers: monitoring of fish numbers, project initiative driven by passionate people from the two organisations.

Project	LIFE09/ENV/D/011 My Favourite River
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3768
Project website	www.my-favourite-river.de/

Alfredo Caggianelli	Rural interventions to reduce urban flooding
<p>About the Project</p> <p>The general aim of the RII project is to demonstrate that Directives 2000/60/EC and 2007/60/EC can also be applied to:</p> <ul style="list-style-type: none"> • Networks of drainage basins and watersheds, not directly addressed by the two directives; and • Heavily urbanised areas along the borders between hilly mountainous territories and the plain, where the minor drainage network is typically modified. <p>The project's specific goals are:</p> <ul style="list-style-type: none"> • To introduce, test and demonstrate the usefulness of (a) innovative territory management strategies and water course intervention techniques, based on WFD and Floods Directive key concepts, in order to manage hydraulic critical points and the ecological quality of the networks of drainage basins and watersheds; (b) innovative economic-legal management tools to support flood risk management and territory ecological restoration; • To demonstrate restoration works in selected creeks; the restoration work will show that flood risk can be dealt with through ecological quality improvement techniques, despite limitations caused by the location of built-up areas along creeks; • To contribute to an improvement in the ecological quality of the minor drainage network located in a heavily urbanised strip close to the hillside, thus reducing local and downriver flood risk; <p>To increase the awareness of citizens and of Italian and European authorities involved in river management about the positive impacts these techniques can have for environmental protection flood risk management.</p> <p>Presentation Summary</p> <ul style="list-style-type: none"> • Information and Public participation • Flood stress in urban areas and flood risk • Environmental problems through roads and agriculture • Hydraulic and environmental restoration: Stream bed enlargement, requalification of riparian vegetation, reconnection with flood plains. • River contracts with public and private stakeholders on the maintenances which resulted also in more interventions on the river • Agreements with farmers 	
Project	LIFE11 ENV/IT/000243 RII – LIFE
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4237
Project website	http://ambiente.regione.emilia-romagna.it/life-rii

3.3.2 Chemical Status Workgroup

Simos Malamis	Chromium in Asopos groundwater system: remediation technologies and measures
<p>About the Project</p> <p>The aim of the project is to establish TVs for chromium in the Asopos river basin and to address delays in the implementation of the Groundwater Directive (GWD). Innovative technologies and methods will be applied to estimate the natural background levels of chromium in the Asopos river basin and appropriate remediation technologies will be then tested and evaluated.</p> <p>Specific objectives of the project are to:</p> <p>Evaluate the properties of the soil and the groundwater and assess their contribution to the potentially high natural background levels (NBL) of Cr(VI); Evaluate the effect of high NBL of Cr(III) and Cr(VI) on the determination of appropriate TVs; Develop a widely applicable (in other parts of Greece and the EU) rational methodology for the determination of TVs, in accordance with the guidelines of Annex II of the GWD; Identify relevant polluting activities in the area and estimate the generated loads and their effective transport until they enter the aquatic environment; Demonstrate different technologies for the remediation of groundwater bodies with high concentrations of Cr(III) and Cr(VI); Establish a programme of measures (PoM) for the Asopos river basin, which will include the implementation of the most efficient chromium removal technologies as well as supplementary administrative and legal instruments, with the active participation of interested stakeholders.</p> <p>Questions</p> <ul style="list-style-type: none"> • Please can you further describe the process of treating Chromium with Iron filings. This process is managed by a partner in Crete. Fe is mixed with sand and water passed through, reducing Cr (VI) to Cr (III). It is then filtered to catch the iron filings, which need to be changed approximately every 2 months. This process can achieve 90% removal of Cr (VI). • Can the waste Chromium be recycled? No, the Cr (III) is removed. • Were the polluting industries notified of the findings/made aware of the pollution they were thought to be causing? Yes. Industries were initially found to be reluctant to participate but this is gradually changing. They have shown an interest but the issue lies with funding – who will pay for the new technologies? The approach has been to try and help them gradually reduce the pollution but the current financial situation makes engagement extremely difficult. • Did the polluting industries have discharge consents in place and if so was Cr (VI) included? Yes. But it is difficult to prove that the pollution was from a specific industry despite the close proximity. Implementation is a real challenge. 	
Project	LIFE 10/ENV/GR/601
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3951
Project website	www.charm-life.gr

Maja Zupančič Justin	Addressing the pharmaceutical problem in hospital wastewaters
<p>About the Project</p> <p>The project's general objective is to introduce an efficient and financially viable technology for the removal of pharmaceuticals (PH) from the effluent of wastewater treatment plants. The technology is based on the advanced oxidation processes (AOP) associated with electrochemical degradation of PH, using different electrodes (graphite electrodes, mixed metal oxide electrodes and boron-doped diamond electrodes). The project will demonstrate technology on a sufficiently large scale to fully evaluate its effectiveness and economic viability. The aim is to demonstrate a solution that it is applicable to all wastewater containing PH and other persistent substances, which also include wastewater from old people's homes and hospitals in the EU. At the same time it is a flexible technology, suitable for different applications, with low maintenance costs and high efficiency.</p>	

Questions	
<ul style="list-style-type: none"> Do you see treatment occurring in the hospital or at WWTPs? What is more cost effective? There isn't a catch all solution, it depends on a number of considerations such as the capability of local WWTPs and capacity. Also certain hospitals may be more suited to hosting their own treatment facilities or it may be more appropriate depending on the type and quantity of pharmaceuticals used e.g. psychiatric hospitals. However, it is too costly to have on-site treatment at all hospitals so a risk based approach should be adopted. What are the optimum operating conditions, for example are they targeting complete mineralisation or just want to reduce load? The process is still being developed, with trials of various combinations e.g. different contact times with the electrode. The aim is to optimise the process to get the best combination of efficiency versus cost. 	
Project	LIFE 13 ENV/SI/000466 LIFE PharmDegrade
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5158
Project website	http://lifepharmdegrade.arhel.si/

Rui Viegas	Advances in membrane technology to improve drinking water against emergent contaminants
About the Project	
The HyMemb project's general objective is to demonstrate the feasibility and sustainability of advanced membrane processes for the treatment of drinking water, in order to provide a safer, more resilient barrier against emerging contaminants, with lower environmental impacts.	
Questions	
<ul style="list-style-type: none"> Is the activated carbon recycled/regenerated or is it disposed of as waste? Yes, it can be reactivated. What is the frequency of cleaning and how are the waste products handled? The process has been optimised to achieve 12 cycles (including backwashing, flushing, and soaking of membranes). How scalable is the technology for larger flows? The prototype is directly scalable by adding membrane area to the process. The scalability depends on the treatment capacity. 	
Project	LIFE12 ENV/PT/001154 LIFE HyMemb
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4742
Project website	www.life-hymemb.eu

3.3.3 Water Efficiency Workgroup

Kim Augustin	Implementing an integrated and decentralised wastewater disposal and energy generation system for urban housing in Hamburg
About the Project	
The project's overall objective is to demonstrate the technical, environmental and economic feasibility of an integrated and decentralised wastewater disposal and energy generation system for an urban housing district in Hamburg, Germany. The concept will bring together well-known technologies, as well as new and innovative prototypes – to be demonstrated for the first time on a large-scale. The system will be developed in different phases, in accordance with the different phases of construction. Specific objectives are to:	
<ul style="list-style-type: none"> Demonstrate an integrated wastewater disposal and energy generation system; Minimise the dilution of sewage with drinking water (flush) by the use of vacuum toilets within 	

<p>an urban district;</p> <ul style="list-style-type: none"> • Improve water quality, i.e. preventing rain and grey water from being polluted with black water; • Save energy by systematically treating and utilising separated wastewater streams. This will be done by preventing energy consuming wastewater processing; • Demonstrate an innovative decentralised energy generation concept based on a biogas plant. The concept will demonstrate the potential to minimise the use of non-renewable energy sources and the potential for energy generation based on separation of black water; <p>Prepare for future phosphorus and nitrogen recovery and effective elimination of micro pollutants such as pharmaceuticals.</p>	
Project	LIFE10 ENV/DE/000158 HWC
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3987
Project website	www.hamburgwatercycle.de

Anna Claire Gonzalez	Reducing the demand on groundwater aquifers
<p>About the Project</p> <p>There are four project objectives:</p> <ol style="list-style-type: none"> 1. Preservation of ground-water resources by reducing the aquifers' exploitation (installation of water-saving equipment, awareness-raising campaigns, dissemination of good practices, consumption follow-up and impact monitoring). Expected savings of 1,9 Mm³/year. 2. Development of the knowledge on consumption behaviours and ratios. 3. Improvement of the control over drinking water demand (upgrade of the distribution network to reduce leakage). 4. Improvement of the local water public governance. 	
Project	LIFE11 ENV/FR/000745 MAC EAU
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4186
Project website	http://www.jeconomiseleau.org/index.php/projet-mac

Ignacio Martin Garcia	Reusing waste water in industry
<p>About the Project</p> <p>The overall objective of the project is to boost industrial water reuse by making available non-conventional water resources through the reuse of urban wastewater in industries. The project concretely aims at demonstrating the feasibility of one or more technological configurations based on the combination of leading-edge technologies to polish and reuse reclaimed municipal wastewater in the chemical, liquid waste disposal and electro-coating industries.</p>	
Project	LIFE12 ENV/ES/000545 LIFE WIRE
LIFE Database	http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=4684
Project website	www.life-wire.eu

3.3.4 Feedback Session to the Main Group on the Three Workgroup Findings

Following the thematic workgroup sessions, the delegates reconvened as a group and were asked to provide the key findings from the mornings sessions around the topics of barriers, project solutions, and suggested policy adjustments.

Group 1: Physical Pressures

Topic	Key Findings
Barriers	- Ownership of and access to land (difficult in particular in urban areas and valuable agriculture areas).

	<ul style="list-style-type: none"> - Access to finance as river restoration developments are costly and also imply maintenance costs. - Lack of space in an urban setting (opening of rivers often too costly or complicated). - Convincing the stakeholders to agree on the measures e.g. first evidence needed for different parties to gain confidence and recognise the benefits. - Conflicting legal requirements can hamper the implementation e.g. hydropower sector and WFD, cultural heritage).
Project Solutions	<ul style="list-style-type: none"> - Start with small-scale measures, pilot demonstrations to engage communities and relevant stakeholders. - Some kind of physical modifications (e.g. removing a dam/barrier or providing access to nature can be powerful to raise awareness and connect people to nature and to care more about the river and riverbanks ⇒ helps to create ownership and involve communities more actively e.g. for maintenance activities and monitoring). - Implementing actions for which there is common ground rather than finding the perfect solution delaying measures. - Proof of evidence is important (costs-benefits including social benefits should be clear) - Multi-level thinking is important to get support for projects. - Collaborative working can also reduce costs (pooling of resources) and generate new financing (crowd funding). - Build time in for monitoring and data gathering/sharing resources and knowledge. - Citizens science can be powerful in that respect and helps to engage stakeholders and create ownership – some challenges still need to be overcome regarding data quality, validation and access to data (e.g. often no possibility to share the data on an appropriate platform)
Policy Adjustments	<ul style="list-style-type: none"> - CAP could be adapted to support WFD objectives. - Conflict of renewable energy policy (hydropower etc.) and WFD implementation. - Often different definitions and standards are applied within a country and at European level - More flexibility in the policies to implement cross-sectoral approaches and to trigger investments across administrative boundaries (people/areas profiting from the measures are not always the same than people who need to act and/areas where investments need to take place). - Make better use of existing legal framework e.g. to Article 14 to engage stakeholders - Measuring and assessing compliance with WFD could also take into account social –environmental benefits rather than only water quality status.

Group 2: Chemical Status

Topic	Key Findings
Barriers	<ul style="list-style-type: none"> - Integration – some nations lack a centralised authority. Member states have different governance structures and organisational set up across Europe. It was felt that in some member states there is a lack of clear lines of authority or integration of authority, this can lead to competing interests. It was suggested that lessons can be learnt from members who have a strong regulator or integration of authorities e.g. for permitting. - Awareness and communication. There was felt to be a lack of understanding of priority chemicals both in terms of technical knowledge amongst professionals such as doctors (the prescribers), SMEs, and in terms of awareness of the issues with the general public. It is vital that learning from LIFE projects is disseminated effectively and that new technologies are made available. - Approach - There should be a holistic view of the issues involved, taking an ecosystem services approach. It was felt that too often focus is on one element to the detriment of the wider picture (e.g. drinking water, sewage). - Lack of policy regulation. In some cases, legislation is considered to lack effectiveness. It was suggested that more stringent legislation focusing on targeted compounds that are damaging to the environment would be beneficial. - Technical barriers. It was suggested that whilst LIFE projects may be effective during their lifespan, the longer term implementation and legacy should become a focus. For example, the feasibility of scaling up new technologies piloted in the projects should be a consideration from the outset.
Project Solutions	<ul style="list-style-type: none"> - There is a need to stimulate innovation, this can be achieved via IP projects on a larger scale. It is hoped that these larger projects can start to tackle some of the governance issues. - A combination of a carrot and stick approach is found to be effective – a mixture of regulation and incentives. - A common issue was found to be the desire from industry for more effective treatments, but an aversion to the risks associated with implementing new technologies due to the costs and potential uncertainty involved. It was suggested that it would be useful to include verification in LIFE projects from the start. This is also related to the difficulty of taking a pilot project/technology to market (i.e. scaling up), and should be considered from the outset to ensure a successful and meaningful legacy. - Consideration of social dimensions.
Policy Adjustments	<ul style="list-style-type: none"> - It was suggested that interpretation of the WFD across member states can differ. This cannot be overcome without greater transparency of reporting. - Thought needs to be given to how we can get all the actors into the picture. There can be conflict between policies. Greater alignment and synergy is needed between policy makers e.g. planners and scientists; agriculture and pharmaceuticals. - There is a need to update legislation to reflect state of the art knowledge and best practice. For example the Nitrate Directive and Sludge Directive and considered to be out of date. - Regulation of new pharmaceuticals should include environmental

	<p>considerations in the cost-benefit analysis.</p> <ul style="list-style-type: none"> - Innovation procurement – set aside of local budgets to support innovative solutions.
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Group 3: Water Efficiency

Topic	Key Findings
Barriers	<ul style="list-style-type: none"> - Financial issues – Projects often develop prototypes but maybe don't understand how to make these financially sustainable. This should be a consideration at the application stage. Applicants could be required to submit a business plan. - Governance/political issues – Projects can fail because of difficulties getting permits from authorities. This is a high risk factor and should be addressed at the project proposal stage. Projects can be vulnerable to political changes on a local level. - Reluctance to change technologies in water authorities. It is vital that the right incentives are identified and that authorities support beneficiaries. - Legal aspects/local barriers – Local legislation needs to be addressed in the course of the project to make sure that there are no obstacles to successful implementation. - Communication and dissemination both during and after a project needs to be strengthened and improved.
Project Solutions	<ul style="list-style-type: none"> - Sharing learning from projects, including what hasn't worked and developing tools to support stakeholders – supports legacy and replicability. - Plan for catchment – small projects fit into bigger projects. - Engagement – need to mobilise local enthusiasm with small projects. - Ownership/stewardship – Citizen science not so big in EU. - Generating local interest – workshops. - Measures can be relatively low cost and opportunities for cost savings (e.g. planned works). - Engaging stakeholders – don't always need to have a plan before. - Start with small measures – create demand for more (citizens) - 100% perfect fish pass too much? May not be the best option. - Small interventions replicated one brook at a time. - Collating and disseminating the evidence (ref benefits and costs) - Collaborative working can pool resources and attract funding - Building in time and resource for monitoring
Policy Adjustments	<ul style="list-style-type: none"> - IP's have the potential to positively influence policy, however this is not the case for most projects. In order to have an impact on policy projects have to be replicable and sustainable.

3.4 25th May 2016 – Field Excursion

River Loud Diffusing the Issue and Farm Facilitation

An optional field visit led by the Ribble Rivers Trust to a more rural setting to see the impact rural areas have on urban areas and to understand the importance of the integrated approach

to River Basin Management was provided for all delegates. The tour visited sites within the River Loud Catchment – a predominantly rural area with a high proportion of cattle farming with associated impacts on the area’s watercourses.

The River Loud prior to the last ice age flowed out to the Fylde coast directly. The last ice age carved a new river channel away from the coast, draining the Loud into the Hodder and then the Ribble. The new river channel, valley and flood plain created near ideal conditions for intensive agriculture. Drainage of the flood plain then occurred and the progression of agriculture led to degraded habitat and diffuse pollution. The Diffusing the Issue project was funded by Catchment Restoration Fund and sought to:

- Combine shared objectives to collaboratively deliver a holistic conservation project
- Encourage a sustainable return to natural river processes
- Improve physical habitat and habitat connectivity to create sustainable populations of wading birds, invertebrate, fish, and other relevant priority habitats and species
- Reduce diffuse and point pollution from rural sources

A total of 7 fish passage schemes, 50 farm visits and 100 “quick fixes” were delivered, but more work is needed to fully restore the Loud Catchment. So the Ribble Rivers Trust are now working with farmers under Natural England’s Facilitation Fund to secure more improvements in the future.



The first stop on the tour was a fish pass in the village of Chipping, demonstrating an engineering solution that has been successfully implemented to improve the condition of the stream for salmonid species. This was followed by a presentation by Sarah Bolton of the Ribble Rivers Trust and a visit to a successful habitat scheme on nearby agricultural land,

where Sarah has worked closely with the land owner to achieve a positive ecological outcome.

4 Summary

The platform meeting comprised a number of keynote speeches, identifying the issues, policy drivers, barriers and strategies to achieving good water status, and presentations from successful LIFE projects in the fields of hydrological barriers, water quality and emerging pollutants, and sustainable water use. Delegates were engaged in group discussions and working groups where common solutions and practices were explored, building on the experience of the LIFE projects in attendance. The shared learning was compounded by a number of excellent field excursions to locations in Manchester and the North West, where delegates engaged with practical examples of all three issues and experienced practical solutions. It is recommended that the findings from this platform meeting are transmitted to the water policy unit in DG ENV. An important outcome from the meeting will be the establishment of a Water Network which will, at the very least, provide a forum for discussion, exchange of ideas and a platform to advertise events. The NEEMO team are currently working on a platform for posting information (presentations, posters and findings) and for future communications within the network. The information and links will be posted out to the participants during the first quarter of the new contract.

ANNEX 1
THE AGENDA

LIFE WATER PLATFORM MEETING WATER WORKS – overcoming challenges to achieving good water status in urban areas Hosted by The Environment Agency at The Museum of Science and Industry, Manchester, UK AGENDA – 24th May 2016	
09:00	Registration
09:30	Session 1 – Meeting the WFD requirements at the EU level Chaired by Donald Lunan
09:40	Opening Address – Hervé Martin, Head of LIFE Environment Unit, A Warm Welcome and Why are we here?
09:50	Keynote Speaker 1 - WFD Challenges in the Urban Environment Claire McCamphill, EU Water Policy Unit, DG ENV
10:15	Innovative filtration media and commercial success after LIFE LIFE02/ENV/UK/146 Howard Dryden AFM, Dryden Aqua Limited
10:35	How stakeholders can contribute to reducing water consumption in Malta LIFE10 INF/MT/091 Investing in Water Geoffrey Saliba
10:55	Q & A session chaired by Donald Lunan, Neemo
11:15	Coffee and networking
11:45	Session 2: River Basin Management in the UK Chaired by Lynne Barratt
11:45	Keynote speaker 2 – England’s Water Environment – Our Approach and Ambition Rory Stewart, OBE MP FRSL Parliamentary Under Secretary of State for Environment and Rural Affairs
12:05	Water in the North West – A Journey Keith Ashcroft, Area Manager Cumbria and Lancashire, The Environment Agency
12:25	Natural Course: A LIFE integrated project for integrated water management in the North West River Basin District LIFE14/UK/IPE/023 Alastair Maltby – The Rivers Trusts
12:40	Q and A session
13:00	Lunch and networking
13:30	Session 3: Field visits - Organise into 5 tour groups
GROUP 1 Physical Pressures	The River Medlock & Moston Brook This trip will showcase the work that has been done and is planned under LIFE IP to tackle some of our most complex urban pollution issues in partnership. See the successes we have achieved so far and hear about our aspirations for delivery over the next 10 years.
GROUP 2	Rochdale Town Centre Regeneration: The River Roch had been under cover for hundreds of years, this project has allowed it to see day light! See an example of how improving water environment has led to social and economic benefits.
GROUP 3 Chemical Status	United Utilities Tour: Visit to one of UK’s largest private water companies and an associated beneficiary in the IPE. This tour will showcase some of the innovative solutions used by United Utilities to meet the past and future environmental commitments for the customers of the Manchester area. Salford Quays: See how an industrial Quayside has been regenerated to become a thriving destination for business and leisure. Hear how significant water quality issues have been tackled and see demonstrations of some of the technical

GROUP 4	solutions that have been employed.
GROUP 5 Resource Efficiency	Resource Efficiency in Manchester city centre; Manchester is striving to be a low Carbon Economy, on this tour see some of the solutions organisations have found to help achieve this. The tour will be guided by Manchester Metropolitan University and includes a walking tour of the city with Red Rose Forest.
	Evening Free to explore Manchester and visit the many delightful eating places!

LIFE WATER PLATFORM MEETING
WATER WORKS – overcoming challenges to achieving good water status in urban areas
 Hosted by The Environment Agency at
 Museum of Science and Industry, Manchester, UK
AGENDA – 25th May 2016

09:15	Session 3: Policy and Practice – common issues and solutions Chaired by Chris People, Neemo		
09:30	Keynote Speaker Ms Jo Harrison, Asset Management Director, United Utilities (Private Sector Water Company dealing with water treatment and distribution in the North West of England)		
09:45	Break into three groups		
	GROUP 1 Physical Pressures Group	GROUP 2 Chemical Status Group	GROUP 3 Water Efficiency Group
10:00	WaterLIFE, WWF UK (LIFE13/ENV/UK/497) Rob Collins The CABA Approach to river basin management	Charm, National Technical University of Athens (LIFE 10/ENV/GR/601) Simos Malamis Chromium in Asopos groundwater system: remediation technologies and measures	HWC (LIFE10 ENV/DE/000158) Kim Augustin Implementing an integrated and decentralised wastewater disposal and energy generation system for urban housing in Hamburg
10:15	My Favourite River, (LIFE09/ENV/D/011) Barbara Gruter Integrated river management in urban areas	PharmDegrade (LIFE 13 ENV/SI/000466 LIFE) Maja Zupančič Justin Addressing the pharmaceutical problem in hospital wastewaters	MAC EAU (LIFE11 ENV/FR/000745) Anna Claire Gonzalez Reducing the demand on groundwater aquifers
10:30	RII – LIFE. (LIFE11 ENV/IT/000243) Alfredo Caggianelli Rural interventions to reduce urban flooding	LIFE HyMemb LIFE12 ENV/PT/001154 Maria João Rosa Advances in membrane technology to improve drinking water against emergent contaminants	LIFE WIRE (LIFE12 ENV/ES/000545) Ignacio Martin Garcia Reusing waste water in industry

10:45	Coffee		
11:15	Discussion session facilitated by Lynne Barratt (NEEMO) Mirjam Witschke (Easme)	Discussion Session facilitated by Chris People (Neemo) Hannah Wilson (Neemo)	Discussion Session facilitated by Donald Lunan (Neemo) Francois Delcueillerie (LIFE Unit)
12:30	Feedback session to the main group on the three work group findings		
13:00	Closing address – what have we learned? Hervé Martin, Head of Environment, LIFE Unit		
13:15-14:00	Lunch		
14:00	Optional field visit led by the Ribble Rivers Trust to a more rural setting to see the impact rural areas have on urban areas and understand the importance of the integrated approach to River Basin Management Note this tour is only suitable for those with VERY late flights from Manchester or for those people staying an additional night		

ANNEX 2
PARTICIPANTS LIST

Project number	Organisation	Representative	Country
LIFE12 ENV/AT/000128 LIFE- URBANLAKE	Stadt Wien, Magistratsabteilung 45 - Wiener Gewässer	Thomas Ofenböck	Austria
LIFE 11 ENV/FI/ 0911 Urban Oases	University of Helsinki, Dept. of Forest Sciences	Dr Wahlroos	Finland
LIFE 14 IP FI 023 FRESHABIT	Parks and Wildlife	Jari Ilmonen Seppo Hellsten	Finland
LIFE11 ENV/FR/000745 MAC EAU	Conseil Général de la Gironde	Anne Claire Gonzalez Marie Taledec	France
LIFE 08 NAT D 010 Lippeaue	Stadt Hamm, Umweltamt	Mr.Schmidt-Formann	Germany
LIFE08/ENV/D/021 MAGPlan	Landeshauptstadt Stuttgart, Amt für Umweltschutz	Mr. KIRCHHOLTES	Germany
LIFE09/ENV/D/011 My Favourite River	Federal Waterways Administration Germany/ Waterways and Ships	Barbara Grueter	Germany
LIFE10 ENV/DE/000158 HWC	Hamburger Stadtentwässerung Anstalt öffentlichen Rechts (AÖR)	Dr. AUGUSTIN	Germany
LIFE 14 IP/DE/022	Hessisches Ministerium für Umwelt, Klimaschutz, Landwirtschaft und Verbraucherschutz	Dr Manuele Osterthun	Germany
LIFE10 ENV GR 000601 CHARM	National Technical University of Athens	Simos Malamis	Greece
LIFE11 ENV/IT/000243 RII – LIFE	Regione Emilia-Romagna	Mr Caggianelli	Italy
LIFE12 ENV/IT/000120 LIFE BIOCLOC	Università degli Studi di Firenze - Dipartimento di Ingegneria Civile e Ambientale	Ms Caretti	Italy
LIFE13 ENV/IT/000169 LIFE RINASCE	Consorzio di bonifica dell'Emilia Centrale	Mr. Aronne Marco Monaci	Italy
LIFE13 ENV/IT/000140 LIFE+ DIGITALIFE	GranitiFiandre S.p.A.	Claudia Bianchi	Italy
		Claudia Bianchi	
LIFE 10 INF MT 91 Investing in water	Malta Business Bureau	Geoffrey Saliba	Malta
LIFE12 ENV/PT/001154 LIFE HyMemb	Laboratório Nacional de Engenharia Civil	Ms João Rosa	Portugal
LIFE12 ENV/SI/000783 LIFE Stop CyanoBloom	ARHEL projektiranje in inženiring d.o.o.	Mr. Gerl	Slovenia

LIFE12 ENV/SI/000443 LIFE RusaLCA	Zavod za gradbeništvo Slovenije - ZAG (Slovenian National Building and Civil Engineering Institute)	Primoz Oprckal	Slovenia
		Mr Peter Nadrah	
LIFE 13 ENV/SI/000466 LIFE PharmDegrade	ARHEL projektiranje in inženiring d.o.o.	Dr. Zupančič Justin Jurij Trontelj	Slovenia
LIFE11 ENV/ES/000569 MINAQUA	FUNDACIÓ RAMÓN NOGUERA	Montserrat Aulinas Masó	Spain
LIFE11 ENV/ES/000606 aWARE	CETAQUA, Centro Tecnológico del Agua	Elsa Mesquita	Spain
LIFE12 ENV/ES/000477 Lo2x	Asociación de Investigación de la Industria Agroalimentaria	Mr Pascual	Spain
LIFE12 ENV/ES/000545 LIFE WIRE	CETAQUA, Centro Tecnológico del Agua, Fundación Privada	Ignacio Martin Garcia	Spain
LIFE13 ENV/ES/000800 LIFE+TL-BIOFER	BIOMASA PENINSULAR SA	José María Gómez Palacios	Spain
LIFE13 ENV/ES/001138 LIFE TEXTILEATHER	Asociación Empresarios Textiles Comunidad Valenciana	Paqui Arán	Spain
		Laura Santos	
LIFE02 ENV/UK/146 AFM	Dryden Aqua Limited	Dr DRYDEN	UK
LIFE13 ENV/UK/000497 LIFE WaterLIFE	WWF-UK	Rob Collins Dominic Gogal	UK
LIFE12 ENV/UK/001133 - LIFE Housing Landscapes	Groundwork London	Hannah Kyrke Smith	UK
		Claudio Fernández Acevedo	Spain
		Marta Mateo García de Galdiano	Spain

