**Ouseburn Co-ordination Meeting**

**16th March 2015, 1:30pm, Tyne Room EA building**

**Introduction & background**

The Tyne Rivers Trust hosts the Tyne Catchment Partnership. There is so much going on in the Ouseburn catchment at the moment and so a need to be co-ordinated. This meeting also allows for opportunities to spark of each other’s projects. The format is almost like a conference, with presentations in two rounds (and a break in between), with time for Q&A.

**Sustainable Sewerage Strategy - Martin Kennedy, NWL**

Approach developed with the lead Local Flood Authorities and the EA. Drainage systems are incredibly complex, all dependent upon each other to work successfully. With changes such as urbanisation, a new approach is needed. The drainage system is fragmented with different (legal) responsibilities. Common goals is a way of overcoming barriers to working together.

The drainage vision wanted to move away from ‘silo’ working; adopting a collaborative ‘one team’ methodology; a balance of public service / environmental need and cost; and co-ordinate for delivering solutions.

The approach taken is through partnership and balancing short-term requirements with longer-term strategic needs. NWL cover the whole of the north-east, with 478 drainage areas. A risk-based prioritisation is needed. Jointly-funded studies then lead to a programme of activities. Customer & community engagement is involved at every stage of this process.

In Tyneside there are 5 local authorities, 912,000 customers, 57 drainage areas, 87km of river and over 4,678km of sewer. How to prioritise? This project was a pilot. Assessment of the public sewage capacity was used, growth strategy, environmental performance tools were used. 6 studies took place across the whole of Tyneside. 1 of the study areas was the Ouseburn - but 5 drainage areas are connected to it. 1 of the areas being taken forward is in the Killingworth / Longbenton area.

Longbenton Letch connects into the combined sewerage system. Forest Hall Letch is a known flood risk. Killingworth Lake (north of here separately sewered) overflows into the combined sewer. The current solution being developed is to divert Longbenton Letch to Forest Hall Letch and do more flood attenuation upstream on Forest Hall. And bio-retention areas connected to Killingworth Lake. The benefits can be assessed in terms of managing flow, CSO spill volume and impact at Sewage Treatment Works.

By working in partnership, other strategies and ambitions were brought into a new assessment of the benefits. In valuing these the ecosystems services approach was tried. The scheme, through partnership, looks much more feasible.

The pilot study is being rolled out to the rest of the north-east region. By working together the evidence is there to take projects forwards.

**Developments, Proposals & Opportunities to influence / SUDS and new developments - Andrew Holmes, N Tyneside Council**

The plan in N Tyneside is currently at consultation stage until the 27th March, so it is still evolving. The draft flooding sequential test looks at all the sites and assesses them in terms of flood risk. This feeds in to the Sustainability Appraisal. Adoption of the Plan might be late 2016. <http://northtyneside-consult.limehouse.co.uk/portal/lp_draft_15>

Key proposals in the plan include :

*Employment*

* land for 12,700 new jobs and 23,000 people by 2032
* which equals 700 new jobs a year and 147ha employment land
* In the Ouseburn, (Weetslade) Indigo Park and Gosforth Business Park are key sites

*Housing*

* 10,200 new homes by 2032
* In the Ouseburn, this includes Killingworth Moor (site 23, 24 & 25) and Murton sites

*Killingworth Moor* :

* 2,000 homes and 17ha of employment land on 15% of that site
* Further master-planning work will take place in summer 2015 to mitigate the flood impacts
* SUDs infrastructure and wildlife corridor are part of the comments already received
* It is a critical drainage area, known constraints such as areas susceptible to surface water flooding are mapped
* The works to the letches / lake mentioned in Martin Kennedy’s presentation are also part of the plans

*Murton :*

* up to 3,000 homes on 237ha of land
* Most of the development could be around Rake Lane (A919)
* There are links to proposed surface water separation at Marden Quarry running eastwards out to sea

More detail is on the flooding sequential test which can be downloaded online.

*(Post-meeting note from Andrew Holmes : Comprised within the plan there are a range of policies that we would welcome your input on:*

* *S7.2 – Housing Figures*
* *S7.3- Distribution of Potential Housing Sites*
* *AS7.4-Strategic Site Allocations*
* *S7.14 – Improving the Quality of Existing Housing Stock*
* *S8.1 – Strategic Green Infrastructure*
* *DM8.2 – Protection of Green Infrastructure*
* *DM8.3 – Green Space Provision and Standards*
* *S8.4 – Biodiversity and Geodiversity*
* *DM8.5 – Managing effects on Biodiversity and Geodiversity*
* *DM8.12 – Development and Flood Risk*
* *DM8.13 – Flood Reduction Works*
* *DM8.16 – Pollution*
* *DM 10.10 – Sustainable Drainage*
* *DM10.11 – Waste Management*
* *DM 10.12 – Protection of Waste Facilities*

*The link below will provide you with a list of all of the evidence based used to inform the Local Plan Consultation Draft 2015.*

[*http://www.northtyneside.gov.uk/pls/portal/NTC\_PSCM.PSCM\_Web.download?p\_ID=558913*](http://www.northtyneside.gov.uk/pls/portal/NTC_PSCM.PSCM_Web.download?p_ID=558913)

*Within the above link under there are some documents that may be of particular interest:*

* *Draft Flooding Sequential Test*
* *Draft Green Infrastructure Strategy*
* *Draft Infrastructure Delivery Plan)*

**Integrated Plan - John Robinson & Kelly Graham, Newcastle City Council**

The typography from LIDAR data shows a well-defined bowl. The river catchment is different to the sewer catchment area (which goes as far as the river Pont). In terms of development there is Newcastle, Ponteland (Northumberland) and North Tyneside - which will all continue to put pressure on the catchment.

An integrated approach is needed. A bid was put to the EA Local Levy and brought in Montgomery Watson Harza. There are a number of different possible actions and what to include in that plan. The timescale is to 2030.

A strategy will be developed, viable options looked at, opportunities and funding sought. From today John would like early thoughts.

The Core Strategy for Newcastle was examined last year and all the documents will be online from tomorrow onwards. Formal adoption will hopefully follow from the end of March. Approximately 6,000 new homes are in the west of the Ouseburn area. Each site has policies about requirements for guarding water, working with the other organisations. One policy also includes betterment for the Ouseburn - how to deliver and interpret that policy is yet to be worked out. There are other hooks in policies for SUDs, water quality etc.

Developers are already gearing up to submit applications from April onwards. Pre-application advice from stakeholders will be needed in a potentially short timescale.

**Questions & Answers / discussion**

Cameron Sked (EA) echoed the amount of requests currently being received for pre-application advice. Cameron had understood a Strategic Masterplan would be needed. The impression is that developers are working individually and whether the timescales are going to work. Kelly Graham answered: sites are grouped together e.g. Throckley, Lower Callerton, Middle Callerton, Upper Callerton, Newbiggin Hall, Kenton Bank Farm, Newcastle Great Park Extension, Dinnington, Hazelrigg / Wide Open. This can be a more formal process once the Plan is officially adopted by Newcastle City Council. There is also an Ouseburn Catchment Plan needed. John Robinson added that there are issues that if sites can’t manage their flows they could all hit the Ouseburn at the same time. There is a need to all give the same message that there is a lot of work yet to do.

Steve Lowe (Northumberland Wildlife Trust) questioned what landowners and developers could do - to be more proactive to take responsibility for these issues themselves. There seems a reluctance to map out themselves areas for flood attenuation, wildlife mitigation etc. John Robinson said that perhaps this leads to working within defined boundaries rather than being able to work wider, involving third parties. Maria Hardy (EA) added that a lot of land is needed for flood attenuation - there is a need to have the overview. Kelly Graham suggested a workshop with developers / landowners from April onwards. There are probably 2 or 3 developers for each site and also a number of different landowners. Martin Kennedy added that we all have a role to play and a need to be more robust, giving an example of a place where developers all had to work together to identify the sacrificial piece of land put aside on a site.

Susan Mackirdy asked about greenfield runoff rates and brownfield runoff rates of water. Andrew Holmes said the North Tyneside Plan sets out the highest standards in order to ensure sustainability.

Rob Carr added that it is not just about moving water around but also about water quality. The Ouseburn already has a whole suite of mitigation measures identified as part of its status as a heavily modified waterbody. Developers should also be giving this due regard, not just managing the flows. Andrew Holmes added that SUDs need a cross-boundary-authority approach (in terms of standards etc). Martin Kennedy mentioned that developers actually like SUDs but there are perceived issues for them in terms of maintenance / liability and whether the SUD will do what it needs to do. Steve Lowe added that the scale is also important - small schemes or big schemes. Maria Hardy agreed - biodiversity gains can come from SUDs.

Amanda McKevitt questioned the plans for monitoring SUDs. These tend to only last for the lifetime of the project, linked to outfalls, rainfall, cleanliness etc. Having something more systematic could be challenging. Steve Lowe agreed - the community can be involved with this, citizen science, which could be managed with developer contributions. Things are progressing towards residents paying for the maintenance of green open space - developers are having to think about the ongoing management of these resources within a development.

Cameron Sked added that there is the risk of missing opportunities - or developers would just do the minimum requirements. There is a need to co-ordinate and to move quite quickly. This would be an opportunity to be more robust about interpreting the policies Kelly mentioned in the presentation. The danger of the developers doing their own Masterplan is that without guidance it can become piecemeal.

**Tea break**

During the tea break, post-it notes were invited to be stuck up on a map at the back of various ideas and priorities.

**WFD failures and why / Waterbody Action Plan - Rob Carr (EA)**

The WFD doesn’t actually give any additional powers, but it does give objectives. Ponteland actually also drains to this waterbody through the sewage network. The Ouseburn is a really complex river system.

The WFD considers not only flow, but also designates it as a heavily modified waterbody (because of mainly urbanisation, flood protection). These impact on the ecological *potential*. Each reason can be looked at and mitigation suggested, to get the ecology back to being as good as possible. This is known as mitigation measures.

Water quality (e.g. dissolved oxygen, temperature, nutrients, ecology, fish, and invertebrates) is compared with its potential. This is used in a system called Catchment Plan - a way of pulling together as much information as possible (e.g. characteristics, classification, designation, risks, objectives, protected areas, monitoring sites, collective actions & comments).

The first river basin management plan is coming to an end and moving to the second phase. A lot of sampling has been taking place against a 2009 baseline. All the elements monitored for are presented with the WFD status together with a degree of certainty. For example fish are failing. There are known Reasons for Failure (RFF).

Rob circulated an A3 diagram illustrating the complexity of the fish element and the invertebrate element. The chart shows the variety of pressures (e.g. ammonia, sediments, BOD etc., as well as ‘unknown’), and the tiers of knowledge which try to specify pressures towards sectors / proposed actions. The next step would be prioritisation. For example some barriers to fish are natural, some are not, some are there for amenity value. Improving water quality from housing estates / industrial estates /road runoff are actions that could be put in place, in partnership.

The WFD is a directive (not a regulation) and everyone has to have due regard to the standards.

**Evidence & Measures project - Abi Mansley (Tyne Rivers Trust)**

The Ouseburn Evidence & Measures project builds on this approach from other catchments in the Manchester / Cumbria area. The idea is to use all the existing data sources to build up a picture of the sources of problems in a catchment, a bit like forensic evidence used in a trial. This works well on catchments with multiple problems and no real consensus on what actions to take.

In the case of the Ouseburn the project will focus on water quality. Lots of data has been gathered over the past 6 months, and it is combining these datasets from different partners (e.g. EA, NWL, academic studies) where it starts to show results. Data can be looked at in terms of changes over time, changes upstream / downstream, changes with flow, and types of pollution.

Analysing these patterns closely can pin-point specific areas, for example a specific housing estate where wrong connections are a problem, enabling focused measures. Or start to query whether water quality problems are linked to farming, landfill, cemeteries or wrong connections, for example.

Very early findings show that there is:

* A local but significant problem upstream of Callerton – wrong connection or sewage infrastructure
* A sewage contamination problem in Kingston Park outfall, dominating locally but declining in impact until
* A sewage or wrong connection problem near Salter’s Bridge, possibly from the Forest Hall / Killingworth area, declining until Jesmond Dene

The next steps are to hold two workshops in May & June, one is the Evidence workshop and one is the Measures workshop. At the evidence workshop, weight ( + - or 0 ) can be given to the information provided in packs as to whether data supports a suspected cause or not. This time allows stakeholders to gain a common understanding and have evidence-based discussions on what problems are and how to deal with them. The Measures workshop, critically involving the same people, enables everybody to programme actions armed with the best available data and the project’s momentum.

In the future it is hoped to apply to approach to other waterbodies in the Tyne such as the Don or the Team. All of the organisations will be invited to the workshops - we’d like to know who is the best person in each organisation to invite.

**River Restoration Recommendations - Maria Hardy (EA)**

The River Restoration Project has funding from flood risk management, WFD and hopefully local levy. The Ouseburn is heavily modified, fails on a number of elements, and is an action hotspot.

There is a crucial need to co-ordinate. The drivers for restoration are: the WFD, delivery or wetland habitat under the flood risk programme (delivery of 10ha wetland habitat), mitigation of pressures from developments, and joint benefits of managing flood flows, creating habitat and water quality.

The Rivers Restoration Centre drafted the report for the EA. They looked at some sites and identified some proposed measures e.g. managing sediment, linking with water quality, natural flood management / flood attenuation, habitat creation, social element.

A total of 7 sections have been drafted as places for easy access (Callerton to Brunton Park). There may also be opportunities in North Tyneside. We shouldn’t confine ourselves to these sections. For example in Callerton the proposed actions could come about through the neighbouring development land. An example of a proposed intervention examples includes placing wood / coir in the channel to improve stream diversity.

How to work together to maximise the outcomes for joint benefits? Incorporate restoration and habitat creation into other existing projects e.g. surface water plan. Or work together for an HLF landscape partnership bid (which involves heritage / community / interpretation angles).

**Living Waterways - Steve Lowe (Northumberland Wildlife Trust)**

The Living Waterways project has been in place for a number of years. Originally it was to focus on reducing flood risk through public engagement, coupled with habitat creation in (deprived) urban areas. A lot of the targets met are those which traditionally are hard for organisations like the EA to meet. The current phase (due to end in a fortnight) focused on urban diffuse pollution.

The project uses research, community involvement, wildlife education programmes, local river clean-ups in partnership with corporate partners (including tax inspectors). There are legacies for us which could still be having an impact on the water.

There are thousands of people within the catchment who are also part of the solution. Local people e.g. dog walkers soon talk to a Wildlife Trust about the issues they observe. By improving the habitat we could have otters back on the Ouseburn.

Photos of a new pond were shown and a discussion about the occasional challenges working with local people. Volunteers learn new skill such as willow spiling. Willow stakes can be planted on areas on bank in canalised locations. Other problems include for example fencing falling down near allotments, and the Wildlife Trust can interact with allotment holders about the products used on the allotments next to the Ouseburn. Litter is another problem - a small team can collect a lot in an afternoon.

Wrong connections in certain areas - the Wildlife Trust would like to work with local colleges who train local plumbers, to help sort out plumbing in hotspots. Information workshops can be targeted to local areas / held in local schools etc. Another idea is an education materials e.g a ten point plan.

Industrial areas is another place for action e.g. the way sand is stored - sometimes a simple thing can make all the difference.

There is still an active and thriving population of otters in the Ouseburn, in some urban areas they may be living on rats rather than fish. Steve mentioned a study he can share.

There are links to the Living Seas campaign / Living Landscapes. We are all responsible for litter, for example.

**Questions & Answers / discussion**

Martin questioned combining data. Jim Heslop answered that, for example the Evidence & Measures shows where the best value interventions would be. The Living Waterways works with local communities. It would be a mistake to think that one project could address all. There will always be a range of plans and projects - we have to manage those discontinuities.

Kelly Graham questioned how does the Evidence & Measures project link into the Ouseburn Catchment Plan / Surface Water Management Plan / Integrated Plan. John Robinson says it should not have boundaries. Maria Hardy added that the E&M looks at water quality. The Integrated Plan is about managing surface water, flood risk, new developments, water quality and wildlife.

Kelly Graham questioned who assesses water quality on development sites. The Local Planning Authority! A development cannot adversely affect water quality and where possible will seek to improve water quality. But how is that water quality assessment made? And how do we know that those assessments are of good quality? Rob Carr added that the EA monitor the Ouseburn for various different elements. But monitoring a development site before / during and after development has not yet been considered. Advice from government is anticipated (new planning guidance) and then local planning authorities will co-ordinate with NWL.

 S106 conditions could be one route, but this needs evidence. Cameron Sked said that for bigger sites an Environmental Impact Assessment (EIA) would be carried out. Having best practice design methods could have a big impact. Susan added that it is difficult when commenting on a planning application how a developer may have assessed whether a SUDs is feasible or not.

Maria asked for ideas or opinions on how to manage the actions. John Robinson agreed that this a long-term vision and a type of management structure is needed between us. But one organisation needs to take the lead. Jim Heslop asked what would be most effective - this group (to co-ordinate and share good practice) or other groups? Is the Ouseburn catchment unique in terms of river management circles, are there any lessons to learn from similar locations elsewhere in Britain? Susan Mackirdy pointed to the Mersey Basin campaign - a 20 year vision, focusing on brining the river back to life, bringing together all the planning authorities, statutory bodies etc. They came up with a joint approach to planning development ensuring everybody works together. The amount of initiatives going on in the Ouseburn at the moment is fairly unique and there is a real need to co-ordinate.

Paul Hulme (PJHYDRO, Evidence & Measures) confirmed how unique our situation is - comparing with Moston Brook (Oldham) did get all the stakeholders in a room, but they were not aiming at a long-term vision and it was a smaller catchment. The [Ballinderry River Enhancement Association ‘RIPPLE’ project](http://www.theriverstrust.org/projects/stakeholder/section4.html) has done something similar. Paul is working on the Evidence & Measures project with DEFRA - who are interested in knowing what is the best practice locally to co-ordinate results.

Let’s focus our monitoring on the elements we expect to see over the next 10 years. As far as Paul is aware nobody is doing that elsewhere. Jim Heslop added that for some of the urban, complex catchments merely understanding the levels of change that are achievable (perhaps more simple for just water quality) - it is how we co-ordinate that to best effect. We seem to have plenty of plans, it is how we link them together and support each other. Maria Hardy agreed, it is the vision that we need.

Susan added should we establish a network of organisations working on the Ouseburn?

Cameron asked John to give a flavour of the political / corporate priority for Newcastle for the Ouseburn and councillor engagement. If we worked on a high-level vision, is there political endorsement and support? There is a senior politician that understands the work on flood risk and the work with Montgomery Watson Harza, but not yet briefed in great depth and detail.

Martin Kennedy mentioned an [article he’d read on WWT online](http://wwtonline.edie.net/features/project-focus-rainscape--dwr-cymru-welsh-water-s-suds-solution#.VQaTSHKhT5o) about a memorandum of understanding at an organisational level (not an individual level) which brought about surface water management interventions. Have we got organisational buy-in, not just to represent our respective organisations today, but wider?

**Post-it notes**

* Wetland Habitat Creation, Wetland Management, Geomorphological improvements, Biological Improvements e.g. water quality - Maria Hardy, EA
* Working in partnership to improve water quality - NWL
* A healthy river supporting a biodiverse ecosystem for people to enjoy - Tyne Rivers Trust
* A land banking mechanism? i.e. offsetting - to allow targeting of schemes at an appropriate scale
* Planned wetland & habitat prior to developments (over and above minimal improvements) i.e. around Gosforth Business Park and Callerton
* A focus on the existing subsidence ponds in and around Gosforth Park area for measures
* Attenuation ponds as part of Sustainable Sewerage Strategy in Killingworth / Forest Hall and Longbenton
* Investigate citizen science monitoring i.e. bird studies, invertebrates, water quality. This could include schools and universities to build long-term datasets

These are all complementary ideas.

**Round up / next steps**

What would be the next step to take as a group - if there is one?

Andrew Holmes welcomes this approach, and the bigger picture. He offered to send around links to the consultation as these next few months are really useful for North Tyneside. **Action Abi**

Another action will be to circulate all our contact details and today’s presentations. **Action Abi**

**John Robinson** agreed to keep everybody informed in the short-term, especially with cross-boundary issues.

Andrew Holmes though a Memo of Understanding would be a good next step. Jim Heslop suggested drawing together a basic note - a place to make connections, spot opportunities and support each other. This could be shared within our own organisations.

Steve Lowe added that this could be sent to the Local Nature Partnership (as another group of organisations). Jim mentioned many other partners and partnerships that it could be disseminated to. Rob Carr added the River Basin Liaison Panel - an opportunity to get sector-led strategic support.

Susan suggested that we (as organisations) meet again, and come up with a vision for the Ouseburn and think about how we then achieve that. Then various partners and organisations could be approached for support. Paul Hulme added that there are examples of that sort of approach, even though it may take 10 years to get the (public) support needed. **Action Tyne Rivers Trust – late April / early May**