



## TYNE CATCHMENT PARTNERSHIP

**13 September 2022 9.30am – 12:40**

### **Online Teams meeting**

Present: Sarah Smith-Voysey (Chair (EA)), Jimmy Young (GMBC), Becky Hetherington (NT), Mark Dinning (DWT), Gill Thompson (NNPA), Gayle Wilson (GMBC), Richard Woodhouse (NW), Steven Lipscombe (NNPA), Natalie Rutter (NCityC), Abi Mansley (NCountyC), Hellen Hornby (Groundwork), Steven Thompson(NW), Darren Varley (NCityC), Rebekah Vickers(Groundwork), Peter Shield (GMBC), Rob Carr (EA), Adam Millington(NPAONB), Carl Hodgeson (NCityC), Tom Stevenson (SCC), Liz Walters(TRT)

1. Finish joining attendees
2. Welcome from Sarah Smith-Voysey and introduction to Rob Carr new post.

Rob Carr moved from the Environment Programme Team as Tyne Catchment Coordinator during Covid into the Sustainable Places team, where he worked with environmental organisations in the North-east, then he had a role in the FCRM team as Partnership Funding Manager. Rob has since moved back into the Environment Programme team looking at government strategy and funding opportunities and is now in a new role as Strategic Partnership Senior Advisor. He is involved in projects that cover a large geographical area eg the North-east or the North. He is currently working on:

- Local Nature Recovery Strategy guidance is due out soon. LNRs are linked to planning and the requirement for a 10% uplift in Biodiversity Net Gain. There will be 4 LNR networks in the NE, but this number may change.
- Levelling -up growth funding has been available to Local and Combined Authorities eg Town and Community Funds but this has been hard to access by the environmental sector. There is now a new fund called Shared UK Prosperity Fund that is better linked to environmental benefits.

Rob has also been working on the following:

- North of Tyne Rural Investment Plan and Borderlands
- DCC Climate Emergency Board
- North-east carbon absorption programme eg construction. NFM and Nature-based solutions procurement and off-setting. EA would rather they were off-set locally through partners.
- North-east Natural Environment Leaders network to share information. Provides a heads-up on what is happening with for example energy capacity and recruitment. Faculty of Sustainable Health Care conference – seeking funding. Rob is reviewing strategy documents from Northern powerhouse NP11 particularly the ones concerning place and culture and trying to get environmental objectives into those documents.

**ACTION** Rob will forward relevant docs and information through to TCP as and when relevant.

## DISCUSSION

Opportunities for influencing LNRs? Usual partners at Senior Manager level plus opportunities for others to feed in via the technical groups.

### 3. Groundwater Project Carl Hodgeson Newcastle City Council (Part of Gateshead Groundwater Team)

Project Context – Lead Local Flood Authorities often have very little understanding of groundwater, the expectation is that small incidents are dealt with locally and it is therefore hard to understand the scale of the issue. Groundwater issues are often channelled down into private drains and then the water company is responsible for processing the water.

Project Background – In April 2016 water started coming out of the ground behind Ikea in the Team valley in an area known as JJ Stanley. Initially it was assumed to be a mains water leak but it was actually minewater from an addit because of a failed pump at Kibblesworth (5miles away). This incident identified a need for a better understanding of our groundwater and industrial legacy.

Kibblesworth controls minewater workings all over the NE from Darlington to north Newcastle. All mineworkings were interconnected underground either during wartime or subsequently to make the logistics of operating them easier. Even after being filled-in, the mineworkings and the interconnections between them act as pathways for water.

A Northumbria Groundwater proposal was submitted to the Flood and Coastal Resilience Innovation fund.

There are 5 FCRI projects in this region.

Aim of FCRI programme:

- Test and demonstrate innovative actions
- Reduce the cost and disruption from flooding and coastal erosion
- Improve the evidence for innovative resilience actions and how they can work together
- Use the evidence to inform future approaches and investments in flooding and coastal risk management

The Northumbria Groundwater project overview and aims are:

- Monitor groundwater levels using the latest technology through Newcastle University
- Develop live mapping and monitoring to understand real time risk
- Develop flood risk mapping to provide an evidence-based approach
- Understand how development has changed the behaviour of groundwater in the Northumbria region
- Improve flood preparedness and track groundwater in real time
- Develop a better understanding of the integrated risks groundwater poses to flood risk infrastructure and other sources of flooding
- Develop a community engagement approach
- Design and implement resilience solutions
- Develop a groundwater management system

There are opportunities as well as issues. The 'outline' business case is not yet signed off. After this is signed off, the next step in the roadmap is to produce the Full Business Case in April 2023.

There is a well-developed management structure with officers from Newcastle and Gateshead Councils and the EA, there is support for the project through the technical team and steering groups from a wider range of organisations.

The existing data and mapping information is feeding into several workstreams and suppliers are being engaged to increase data available to the project. The location of the first borehole has been finalised for near the Metrocentre.

## DISCUSSION

Possibilities for producing energy from groundwater and reducing minewater treatment through sewage treatment works

### 4. Nutrient Neutrality Zoe Lewin (DCC)

Cancelled – see presentation attached alongside these notes

### 5. Drainage Management Plan Richard Woodhouse (NW)

The DWMP draft was published on 30<sup>th</sup> June which NW has been working on since 2018. The government published the Storm Overflows Discharge Reduction Plan (SODRP) on 26<sup>th</sup> August which includes targets that water companies will have to achieve.

The DWMP consultation period ends on 30<sup>th</sup> September and the final draft will differ significantly due to the impact of the SODRP. The draft DWMP includes 4 options to provide a balanced view:

- Option 1 Least Cost Storm Overflow
- Option 2 Least Cost Storm Overflow and Northumbrian Integrated Drainage Partnership
- Option 3 Best Value Storm Overflow
- Option 4 Best Value Storm Overflow and Flooding Ambitious Goal

Options 1 and 2 are the same apart from option 2 includes a reduction in risk of internal sewer flooding

Options 3 and 4 provide multiple benefits linked to delivering the SODRP targets and also reduce internal sewer flooding. But option 3 does not achieve the Flooding Ambitious goals of zero internal sewer flooding on a 1 in 20 year rainfall event by 2040 which option 4 does.

None of these options would impact dry water flow. They all have cost implications which do not include WINEP or other environmental NW funds. The cost to customers would increase gradually over time rather than by a sudden increase.

Option no.	1	2	3	4
Bill impact by 2045 (%)	13	17	34	38
Bill Impact by 2040 (£)	49	64	123	138

## RED UP and UKCP18 Tool

These tools predict storm overflow changes that will take place because of climate change. Initially the RED UP tool used only 10 data points, the newer models used 1862. This has an impact on what Northumbrian Water needs to do.

The UKCP18 tool models rainfall, the old models had a 20% uplift by 2045 and a 30% uplift by 2060. Newer versions are much more spatially focussed with many more data points.

The RED UP tool predicts an increased spill frequency for storm overflows. The UKCP18 does not predict that flooding will be as severe as other models. More evaluation as to what this means is required and all models need to be run again to create new solutions.

## SO-DRP Overall Targets

- By 2035 water companies will have improved all overflows discharging into or near every designated bathing water; and improved 75% of overflows discharging to high priority sites
- By 2050 no storm overflows will be permitted to operate outside of unusually heavy rainfall or to cause adverse ecological harm
- Water companies must significantly reduce harmful pathogens from storm overflows discharging into and near designated bathing waters.

## RED UP Tool

This tool predicts storm overflow changes that will take place because of climate change. There are several versions which have used different numbers of data points.

The final DWMP may be very different from the draft version.

## Key draft to final activities

- Develop approach for appraising acceptable levels of network storage
- Whole life costs being developed
- Inclusion of storm overflows not included in draft DWMP
- Re-run all models using latest climate change guidance
- Further refine option selection approach and strategy

## Consultation

This is now 'live'. There are two sets of questions for individuals and organisations.

Northumbrian Water want to do as much as possible but are concerned about affordability.

## **DISCUSSIONS**

Comparisons made with costs of other domestic services

## **ACTIONS**

Partners asked to submit a response to the draft DWMP.

## [6. Hadrian's Wall Loughs Steven Lipscombe](#)

Hadrian's Wall Recovering Nature initially focussed on Greenlee Lough which includes most of the SSSI, SAC and WHS designations. It is a Nature Restoration project and Greenlee was quickly

established to be a fragmented wetland. The NNPA want an evidence-based approach and to remove barriers for a landscape nature-based restoration.

#### Hydrological Mapping

There are issues around nutrient enrichment, Greenlee is failing WFD for phosphate but there is a need for more data and information. The Reece Foundation funding facilitated data collection and a ground survey and identification of the opportunities and interventions. The Environment Partnership have been brought on board to carry out this work over the Haltwhistle Burn catchment.

A web-based map interprets the current data and is ready to be reported to the Roman Wall Lough's group. Opportunity mapping will take place across the area and will include costed feasibility, landowner consultation and identify funding sources.

#### Landscape Recovery Pilot

This funding is the top tier of ELMS and a project was submitted covering a similar area to the Recovering Nature project (4800ha). Thirteen private and public landowners signed up to the application which had a species and water quality focus. It was unsuccessful but there will be another round and it was a useful exercise.

#### WQ monitoring

Capital funding from Natural England was granted for 3 water quality monitoring SONDE systems. There are 3 inlets into Greenlee Lough which have different land uses:

- FC
- Natural England and grazed
- Grazed

WQ monitoring on each site would give a clear indication of where the phosphates are coming from. In the future the project is keen to upgrade to auto samples to enable the capture of unique spate events when it is difficult to be present and a peak deposition of pollutants may occur. This system is up and running but is still in development and needs to be rolled out over whole area.

#### Recruitment

There is a need to monitor whole host of metrics eg sociological and to understand what we need to monitor for these metrics and to ensure this is done in a standard way so we can compare approaches. This will be a two year role. Other monitoring taking place includes mink, reptiles and waders.

There is a need for capital works on Greenlee to reduce the impact of increased traffic across the site by culverting a ford and provision of livestock water provision via troughs not water courses. There is also peat coring and DNA profiling taking place at Sewingshields to inform land use decisions.

#### **DISCUSSION**

Whether the opportunity mapping will be publicly available

## 7. NECH Workshops Feedback Liz Walters (TRT) / Sarah Smith Voysey (EA)

Thank you to all Tyne CP members who have contributed to the North East Catchments Hub workshop and uploaded their project ideas for consideration in the WINEP (Water Industry Environmental Programme) via the mapping portal.

The workshops have provided a really useful opportunity to exchange information on catchment and Nature-based Solution projects and concepts for new work with over 100 projects suggested. Where these align most strongly with WINEP drivers we hope to see them taken forward through that process but it is great that we now have a list of projects to seek support and funding for from elsewhere. Some of these have a clear regional relevance so we look forward to collaborating more widely going forward.

The NECH team will now review the project ideas with NW and the wider WINEP team, the shortlist of projects should be completed by November and we will engage partners again towards project development.

If anyone would like more information please get in touch with the NECH team directly.

### **ACTION**

EAW to circulate further information with the notes from this meeting

## 8. AOB

- Work on the Ouseburn is integrating different university projects and other organisations. To facilitate working more holistically, the next stage is to run the first SCP for a while if interested in attending contact Sarah Smith-Voysey.
- LNR has been agreement but not yet publicised. Tyne catchment is divided into the following areas:
  - North of Tyne NCountyC, NCityC, North Tyneside
  - South of Tyne Gateshead, South Tyneside and Sunderland
  - Durham DCC
- [First Call for the 13<sup>th</sup> Symposium for European Freshwater Sciences.](#)
- Proposed date of next meeting 7<sup>th</sup> February 2023 and this will be planned as an in-person meeting. If any partners have projects that have the potential for a site visit please get in touch with Liz Walters.