

## **River Team Catchment Partnership Minutes**

**10am, 28<sup>th</sup> April 22 - Virtual meeting on Teams**

**Attendees:** Zoe Lewin Chair (Durham County Council), Michelle McGinn (Gateshead Council), Jimmy Young (Gateshead Council), Gayle Wilson (Gateshead Council), Jayne Calvert (Gateshead Council) Nicola Wilkes (HE), Geoff Parkin, Becka Bessant (Costain), Steven Mollon (EA), Clare Deasy (NWL), Dr Rachel Penn (Woodland Trust), Nicola Wilkes (Highways England).

**Apologies:** David Werner (Newcastle Uni), Carl Hodgson (Newcastle Council), Peter Shield (Gateshead Council)

**1. Welcome** Zoe Lewin, Durham County Council

### **2. Introduction to Sarah Smith-Voysey Environment Agency**

Introduction from Sarah Smith-Voysey. Sarah was the new permanent Tyne Catchment Co-ordinator, at the Environment Agency. She would chair the Team Catchment Partnership in the future. Sarah had worked for the Environment Agency's Planning Team, Newcastle University and Ordnance Survey; and her interests included GIS/satellite imaging, planning and the environment.

### **3. Update on A1 improvements (A1 Birtley to Coal House) Becka Bessant Costain**

Becka Bessant provided an update on the A1 scheme. Significant construction work was underway including: piling rigs to stabilise the ground with cement, grouting of mine-workings and excavation of material South of Allerdene Bridge. The final design of the attenuation pond, South of Smithy Lane, was awaiting sign off. Lots of groundwater and surface water monitoring was underway: frequent sampling of groundwater bores and monitoring of watercourses (Allerdene Burn, Ridley Gill, unnamed watercourses and River Team) including water levels. Information had been sent to Matthew Rountree at EA to assist the groundwater project. There had not been any significant rainfall and there was only one permitting issue with EA at Allerdene Burn which was within the control limits.

SSV – asked how far the programme of works had progressed, potential impacts on the River Team and requested a site visit.

BB - The A1 scheme would be finished in 2024. There would be significant below groundwork on the bridge piers. Hydro-demolition was underway on Kingsway roundabout breaking up the existing concrete with high pressure water by Aquaforce. There was a consent in place for this to discharge into a NWL sewer: it required control measures in terms of planning, capturing, treatment and then discharge into foul sewer. So far, the scheme had not encountered significant groundwater or heavy rainfall/flash flooding. It was important to have in place water management contingency plans. There were three surface water discharge points into the River Team. These were subject to an environmental permit from the EA, which required treatment i.e. removal of silt through a gravity-fed system, weekly sampling of water with lab testing (e.g. metals, chemicals, pH) and daily visual monitoring.

**Action:** LW to liaise with BB to set up a site visit for interested stakeholders.

#### **4. Northumbria Groundwater Innovation Project**

Apologies from Carl Hodgson who was unable to attend: the presentation was postponed until the next meeting.

Geoff Parkin provided a brief update. Northumbria Groundwater Flooding project was a 5-year project which would improve understanding of groundwater/mine water flood risk in the lower Team and the lower Derwent catchments. It involved mapping and monitoring, working with Newcastle University's Urban Observatory. Data would be amalgamated from deep & shallow mineworks and surface water sources, generating a model to analyse data, and then there would be an investigation of management solutions such as forecasting/ warning systems. The outline business case would be submitted to tomorrow.

#### **5. Newcastle University Water Quality -David Werner Newcastle University**

Apologies from David Werner. Gayle Wilson and Liz Walters briefly updated group.

David Werner had three MSc students who were going to undertake water quality research on the River Team. This research would be similar to the Ouseburn research, looking at pathogens, chemicals, and plastics. An initial inception meeting had been held in March. Eight sampling locations needed to be determined taking account of possible sources of pollution. The students were putting together a research proposal for June.

**Action:** GW to circulate a map of collated information to help with the determination of sampling locations and arrange a catch up with the project working group.

**Action:** BB to feed in the A1 surface water monitoring locations.

#### **6. Team Valley FAS Steven Mollon Environment Agency**

Steven Mollon gave a presentation providing an update about the Environment Agency's Team Valley Flood Alleviation Scheme. It was a multi-site scheme phased over 7 areas, providing primarily commercial protection on Team Valley Trading Estate, with some residential protection at Lady Park & road protection, along with multi-functional benefits such biodiversity net gain, and fish passage. There was a partnership funding package of various funding streams including accelerated funding. There were two phases of funding: phase 1 the full business case was expected to be submitted in Summer 2022, Phase 2 FBC was expected to be submitted in 2023.

Phase 1

- Eslington Park – following a successful funding bid, removal of weir would take place in next 2-3 months. This would be followed by the removal of the culvert and a new river channel corridor with cycleway and footpath, unobtrusive lighting, new cycle bridge and new foot bridge at Norwood Nature Reserve. The removal of culvert engineering was challenging to ensure no adverse impact on Network Rail assets. The weir and culvert would be removed Summer 2022 and completion was expected late 2023/2024.

- Team Valley Trading Estate – measures to provide protection for non-residential properties included: removal of existing unused private footbridge, re-routing of infrastructure power grid/removal of sub-station, ground raising, minor embankment, kerb raising, minor works to premises, use of buildings as defence (discussions to commence with property owners). Further consideration of surface water modelling underway. Work to commence Summer 2022 and completion expected 2024.
- Kingsway Culvert – interventions are required to aid fish passage (e.g. trout, eel, salmon) in Kingsway Culvert. The preferred options were a wall and gravel structure – further detailed analysis was required to ensure no increase in flood risk, and liaising with Highways England.
- Lady Park Burn – improved trash screen, with increase flood capacity. Work starts in next couple of weeks, ending in July 2022.

## Phase 2

- Lamesley Pastures NFM  
There were several constraints: archaeology, utilities. Options being considered included river realignment/ re-naturalisation: re- stalling meanders, removal of embankments, new features to create wetted areas for biodiversity net gain. Further landowner engagement was required.

GW highlighted there had been concerns over NWL's new rising main alignment, and potential to constrain temporary works and the long term solution. EA were awaiting feedback from NWL about the revised alignment.

- Black Burn NFM  
Increasing flood storage capacity around the Watergate Forest Park was unlikely, given liability issues associated with the classification as large raised reservoir. A number of other flood water storage sites on or near the Black Burn were undergoing assessment: lots of small storage NFM, leaky wooden structures. Landowner engagement required. Work to commence 2024 and complete 2025.
- *Hedley Hall Woods* – potential for a large number of interventions over a large area, benefits include flood water attenuation, increase in biodiversity and habitat and the reduction in surface water flood risk to properties at Hedley Hall Farm. Ridley Gill potential to include 30-40 leaky wooden structures and small bunds considering SSSI status. Fell provides more opportunities: daylighting culvert, historic channel re-alignment and BNG. Engagement to start with Hedley Hall Farm residents commenced. Assessments for the ecology including Great Crested Newts to commence.
- *Other measures* – Coltspool, Urpeth Woods and Tanfield Lea are on hold and less viable. Still looking for opportunities on Rowletch Burn, working with partners.

Michelle McGinn highlighted DWT was undertaking survey work, including mink trapping, along the Team for the Naturally Native project.

Geoff Parkin asked about the integration of the FAS scheme with the groundwater innovation project. Sally Gallagher at EA had been consulted.

**Action:** GP to discuss with hydrological modelling teams.

## **7. AOB and date for next meeting**

- Zoe Lewin gave an update about nutrient neutrality. On 16<sup>th</sup> March, Natural England had issued nutrient neutrality advice to 10 local planning authorities in the Tees catchment, stating that the Teesmouth and Cleveland Coast Special Protection Area (and Ramsar Site) (SPA) were now considered to be in an unfavourable condition due to nutrient enrichment. Any development which could pollute the SPA with nitrates was required to undertake an appropriate assessment, and ensure mitigation measures that demonstrate no increase in nitrates. This affected about a third of County Durham. An additional 42 Councils had been affected in March, other catchments/protected sites had been identified including around Lindisfarne, Eden Valley-Cumbria. Natural England had issued a nitrate calculator to work out mitigation measure requirements for development. Strategic mitigation solutions needed to be identified, particularly for smaller scale development contributions, working with the catchment partnership. Mitigation measures may include wetlands, reedbed, replacing pig farm with woodland/wetland. Based on the experience of other catchments e.g. Solent, significant lead time was required to put in place strategic mitigation solutions.
- Becka Bessant highlighted a webinar/talk on the treatment of mine workings on Scotswood to North Brunton Birtley Area A1 area, covering geological structure and the extent of historical mine workings along with the risks to design (link shared with group).
- Date time of next meeting: 13<sup>th</sup> October am.