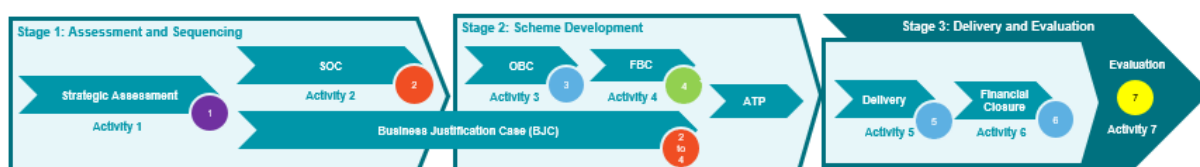


<b>Report to:</b>	Combined Authority
<b>Date:</b>	7 December 2023
<b>Subject:</b>	<b>Flood Risk Management Project Approvals - Investment Priority 4 – Tackling the Climate Emergency and Environmental Sustainability</b>
<b>Director:</b>	Liz Hunter, Director of Policing, Environment & Place
<b>Author:</b>	Craig Taylor, Head of Strategic Portfolio Office

## 1 Purpose of this Report

- 1.1 To report on proposals for the progression of, and funding for projects under Investment Priority 4 – Tackling the Climate Emergency and Environmental Sustainability Investment, within the West Yorkshire Investment Strategy (WYIS), that have been considered at stages 1, 2 and 3 of the Combined Authority’s assurance process.



- 1.2 The recommendations can be found in Section 12 of this report.

## 2 Report

- 2.1 This report presents proposals for the progression of schemes through the Combined Authority’s assurance process in line with the Combined Authority’s Assurance Framework. Further details on the schemes summarised below can be found as part of this report.

## 3 Improving Climate Resilience – Flood Risk Management

- 3.1 Around 5.2 million properties in England (or one in six properties) are at risk of flooding. In West Yorkshire approximately 39,000 residential properties and 13,000 commercial properties fall within a flood zone. Flooding is likely to become a more frequent occurrence as a result of climate change.
- 3.2 There is now a consistent pattern of wet winter periods, with saturated land and consistently high river levels making our communities increasingly vulnerable to a higher number of intense storms. Many communities, particularly in small towns, are struggling to recover, and businesses are unable to plan for sustainable growth. These ongoing flood incidents have reinforced the need to secure capital investment to allow communities to be more resilient to flooding and avoid both the human suffering and economic cost that comes with these events.

- 3.3 The [West Yorkshire Climate and Environment Plan](#) (CEP) - approved by the Combined Authority in October 2021 - is the Mayor's and Combined Authority response to tackling the climate emergency, protecting the environment and achieving a net zero West Yorkshire.
- 3.4 Within the CEP, the following critical action areas are identified in regard to Flood Risk Management:
- CR01 Climate Ready Strategy
  - CR02 Embedding Climate Readiness
  - CR03 Flood Risk and Drainage
  - BI01 Business Sustainability Support
- 3.5 CR03 Flood Risk and Drainage - with a focus upon Natural Flood Management – was 1 of 7 actions within the CEP prioritised for early investment by the Climate, Energy and Environment Committee on [22 March 2022](#) as part of Wave 1 activity. The CEP Wave 1 portfolio gained decision point 1 (strategic assessment) approval from the Combined Authority on 22 July 2022. In addition, in July 2023 the Climate, Energy and Environment Committee approved the Strategic Outline Case for a Capital Flood Infrastructure programme.
- 3.6 The project recommended for approval in this paper therefore forms part of a wider programme and strategic approach which seeks to adapt our communities so that they become more resilient to future flood events.
- 3.7 The scheme is part of the Natural Flood Management Programme. The total programme budget is £7,000,710. The programme comprises of up to nine schemes aiming to increase flood resilience to homes and businesses by implementing approximately 3,500 natural flood management measures.
- 3.8 The measures will implement natural processes to slow, store and filter water, with the effect of altering how water moves through the river catchment area to reduce peak river flows further down the watercourse. The habitats improved by the Natural Flood Management – Flood Risk and Drainage Programme will result in carbon sequestration supporting reduced carbon emissions and improve climate resilience.
- 3.9 The Natural Flood Management programme is being delivered alongside the Combined Authority's Capital Flood Risk Management programme as part of a whole river catchment based approach to managing flood risk. The Capital Flood Risk Management programme has a total Combined Authority Budget of £10m.

## Scheme summaries

<p><b>Wortley Beck Re-naturalisation scheme</b></p> <p>Districts: Leeds &amp; Bradford</p>	<p><b><u>Scheme description</u></b></p> <p>The Wortley Beck re-naturalisation project will reduce the risk of flooding in Wortley, through the introduction of natural flood management interventions in Bradford and Leeds districts, that slow the flow of water into the beck and reduce the surge of water going down after heavy rain, reducing the risk of flooding in Wortley. The project will regenerate the catchment's native species and soil health to reduce erosion and silt. The project will improve the local environment for local people and wildlife.</p> <p>The scheme is to be delivered through the Single Investment Fund (SIF), Investment Priority 4 gainshare allocation.</p> <p><b><u>Impact</u></b></p> <p>The scheme impacts will include more effective water retention in improved woodland and better managed semi-rural pasture. The project will create an informed landowner community with good land management practices favouring biodiversity. Improved footpaths for everyone and confidence to access them through increased volunteer and community engagement will boost health and wellbeing. Wildlife and native flora and fauna will increase in the locality.</p> <p>A value for money assessment of the project's benefits is not possible because they are general and distributed throughout the length of the water course and cannot be linked to a quantified reduction in flood risk for specific assets. This is in common with other natural flood management schemes as they bring multiple benefits as recognised by the Environment Agency.</p> <p><b><u>Decision sought</u></b></p> <p>Approval to proceed through decision point 2 (strategic outline case and decision point 4 (full business case) and work commences on activity 5 (delivery).</p> <p>Total value of the scheme - £1,000,000</p> <p>Total value of Combined Authority funding - £1,000,000</p> <p>Funding recommendation sought - £966,000</p> <p>A decision by the Combined Authority is sought as part of this report</p>
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## **4 Information**

- 4.1 The Combined Authority's assurance framework requires that formal approval is given to the following elements of a scheme as part of its development:
- The progression of a scheme through a decision point to the next activity.
  - Indicative or full approval to the total value of the scheme funding requested.
  - The Combined Authority's entry into a funding agreement with the scheme's promoter.
  - The assurance pathway and approval route for future decision points.
  - The scheme's approval tolerances.
- 4.2 This report provides information required to enable the Combined Authority to approve each of the above elements.

## Projects in Stage 1: Assessment and Sequencing

<b>Project Title</b>	<b>Wortley Beck Re-naturalisation Scheme</b>
<b>Stage</b>	2 (scheme development)
<b>Decision Point</b>	2 to 4 (business justification)

Is this a key decision?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:		
Are there implications for equality and diversity?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

### Background

- 4.3 This scheme comes under the Flood Risk and Drainage programme agreed as one of seven programmes in Wave 1 of the West Yorkshire Climate & Environment Plan. The Wortley Beck Re-naturalisation Project will slow the flow of water into the Beck and reduce the volume and flow of water going down the Beck after heavy rain. This will reduce the risk of flooding in Wortley and in turn reduce peak flow into the River Aire.
- 4.4 The land in the beck catchment, which is the area of land where water collects when it rains, is currently degraded and there are issues with silt, murky water, poor quality woodland, invasive species, overgrazed land, and erosion. The main alternative to implementing the proposed natural flood management measures would be more expensive civil engineering changes further down in the beck, where water flow is enclosed in narrow channels and culverts because of overdevelopment on its lower banks. Natural flood management methods will bring additional benefits beyond flood protection and is part of the Combined Authority's investment in tackling the Climate Emergency.
- 4.5 Leeds City Council (LCC) and Bradford Metropolitan District Council (BMDC) will work as joint partners with the Yorkshire Wildlife Trust (YWT), which has been appointed as the delivery partner for this project by the Environment Agency. This project builds on the success of previous partnership delivery by Leeds and Bradford Councils of the Leeds Flood Alleviation Scheme natural flood management work in the upper catchment of the River Aire and at Apperley Bridge. Leeds and Bradford Councils both own land in the Wortley Beck catchment and joint work between council officers will ensure that interventions are planned and delivered to integrate with current and future planned works on flood alleviation at both the councils.

4.6 The scheme objectives are to:

- Create effective water retention in the Wortley Beck catchment to 'slow the flow' and reduce flood risk lower down the Beck by 31 January 2027.
- Boost the quality of woodland and semi-rural land and grazing in terms of regeneration of native species of plants and animals and reducing soil erosion and silt, and so contribute to carbon sequestration.
- Improve the local environment for wildlife and people accessing the area.

4.7 A Business Case Summary is provided in Appendix 1.

### **Outputs and Outcomes**

4.8 The scheme outputs are to be delivered by 31 January 2027. More details of these outputs, such as numbers of each intervention, will be agreed in the annual delivery plans required as part of the conditions of approval to proceed with this project and will include:

- Natural flood management (NFM) interventions such as leaky dams, brushwood barriers and strategic placing of felled timber.
- Hectares of woodland improved, and hectares of land rehabilitated to a better conservation status. This will be achieved by interventions such as opening up the woodland canopy to allow light through to the woodland floor, removing invasive species and replanting with native species.
- Hectares of wetland restored and created.
- Number of leaky dams installed.
- Number of landowners engaged through dialogue and motivated to implement NFM measures. Number of landowners supported to apply for grant where appropriate.
- Number of volunteers including those engaging in 'citizen science' to monitor and evaluate impacts.
- Number of community events including communication with and involvement of schools and 'friends of' groups to encourage access to semi-rural land and woods and boost community interest.

4.9 The scheme outcomes are:

- Improved water retention in the catchment, resulting in slowed water flow through the watercourse and less sediment in the beck.
- Improved quality of woodland and a return to native plants to promote biodiversity and carbon sequestration.
- Reuse of felled timber on site to provide barriers to protect sensitive areas and support insects and small wildlife.

- An informed landowner community which owns and acts on natural flood management and improves the natural environment for the benefit of people and wildlife.
- Improved access for all and volunteer wellbeing and skills.

A cost benefit ratio for the scheme cannot be calculated as the benefits of the scheme are general, dispersed, and non-specific as noted above. Natural flood management schemes have wider benefits and a high strategic value that are hard to define as monetised benefits.

### **Tackling the Climate Emergency Implications**

- 4.10 Design and delivery of appropriate natural flood management interventions suited to the local land conditions and placed for maximum effect based on the high level 'flood mapping' study completed for Leeds City Council and the Yorkshire Wildlife Trust survey data developed during the project's development phase.
- 4.11 The cumulative impact of numerous natural flood management interventions in the upper catchment of Wortley Beck will have the general and dispersed benefit of reducing the risk of flood in the Beck's lower catchment and the mid-section of the River Aire's watercourse.
- 4.12 The project will offer additional benefits including reduced leaching of silt and promoting improved quality of soil, water clarity and biodiversity.
- 4.13 The mosaic of small interventions the project delivers cannot be quantified because they cannot be linked to specific gains or specific assets protected further down the Beck. This issue is in common to all upper catchment NFM schemes that have a strong strategic rationale of being the 'right thing to do', as recognised by the Environment Agency. For this reason, using the Carbon Impact Assessment Tool is not appropriate.

### **Inclusive Growth Implications**

- 4.14 The scheme inclusive growth implications include:
- The areas affected by flooding from Wortley Beck include communities with lower levels of income, and so are less likely to have the insurance or resources to recover well after flood events.
  - Fear of flooding is a source of anxiety and worry that has negative impacts on the health and wellbeing of at risk communities, in addition to the impacts of flooding when it occurs. These will be lessened by measures that reduce the frequency and extent of flooding and has been recognised as an outcome of previously implemented flood alleviation schemes such as the Leeds Flood Alleviation Schemes 1 and 2.
  - There will also be opportunities for people from the local community to volunteer and learn new skills as part of the community science planned

to monitor and evaluate the impact of the project. Catchment officers from the Yorkshire Wildlife Trust will support this.

### **Equality and Diversity Implications**

- 4.15 An Equality Impact Assessment (EqIA) has been carried out part of this scheme's development. Further assessment is a condition of approval to proceed for the scheme and equality and diversity impacts will be taken account of as part of the development of the scheme. An Equity Policy statement has already been provided by the Yorkshire Wildlife Trust who is leading the delivery.
- 4.16 The project is investing in flood prevention in an area where residents often have lower levels of income and live in social housing, where residents are more likely to be disabled, older or have other protected characteristics than more affluent areas. This is based on research from the Inclusivity Champion and West Yorkshire Health Care Partnership.
- 4.17 Improvements to footpaths that have become inaccessible to the public, for example due to erosion, will come as a result of the natural flood management interventions, returning access for to semi-rural spaces, and supporting local people's wellbeing.

### **Consultation and Engagement**

- 4.18 The scheme has comprehensive plans for stakeholder communication and engagement using the learnings of similar natural flood management projects such as the Leeds Flood Alleviation Scheme Natural Flood Management work in the upper catchment of the River Aire, which also includes works in partnership with Bradford Council at Apperley Bridge. These plans include engagement with landowners in face to face visits and letters and to consult volunteer groups in the community.
- 4.19 The Yorkshire Wildlife Trust will lead consultation with the key Stakeholders. They will lead joint work with officers of Bradford and Leeds councils, the private sector landowners and volunteer groups in the catchment.

### **Risks**

- 4.20 The scheme risks and mitigations are:
- Private landowners do not fully engage with the project and natural flood management interventions are not delivered consistently across the catchment, reducing the overall effectiveness. This will be mitigated by having the friendly face of Yorkshire Wildlife Trust as the delivery partner and lead contact for landowners; and providing a variety of communication methods and support through the project.
  - Private landowners are reluctant to accept liability for ongoing maintenance. This will be mitigated by selecting the most appropriate



designs in consultation with individual landowners to minimise disadvantages to them and emphasise the land and catchment benefits.

- Natural flood management interventions are overridden or destroyed by engineering works for subsequent works. This will be mitigated by effective stakeholder engagement planning in the project, and partnership with Leeds and Bradford council officers will ensure that interventions are planned and delivered to integrate with the flood alleviation plans of each Council. Partnership working will be confirmed in a collaboration agreement between the council partners.
- Seasonal constraints or bad weather could delay delivery works. This risk will be reduced by effective scheduling around seasonal constraints such as avoiding felling or pruning trees when birds are nesting, and contingency being allowed for bad weather in autumn and winter.

### Costs

- 4.21 The total scheme costs are £1,000,000, which will be entirely funded by the Combined Authority from the West Yorkshire Climate and Environment Action Plan (CEAP) Funding.
- 4.22 Development funding of £34,000 was approved on 10 March 2023 by the Combined Authority’s head of economic implementation, from the West Yorkshire Climate and Environment Action Plan (CEAP) Funding.
- 4.23 The project is being funded by the Combined Authority but as landowners become engaged and decide to implement natural flood management measures directly they may find new sources of grant funding or contribute match funding personally. Additional funding secured as the project progresses will be monitored and reported on in the Annual Delivery Plans and the project closure report (e.g., new funding through ELMS – the English Land Management Scheme that is under development to replace the Common Agricultural Policy that operated prior to Brexit).
- 4.24 The Combined Authority will need to enter into a funding agreement with Environment Agency for expenditure of up to £966,000 from the Single Investment Fund (SIF), Investment Priority 4 gainshare allocation.

### Future Assurance Pathway and Approval Route

Assurance pathway	Approval route	Forecast approval date
5 (Delivery Closure)	Recommendation: Combined Authority's Programme Appraisal Team Decision: Combined Authority Director	31/12/2026

### Other Key Timescales

- Start of Delivery: 15 January 2024.

- Completion Date: 30 January 2027
- Project Evaluation: 31 March 2027

### **Assurance Tolerances**

4.25 This approval is the first decision point for the scheme at committee. The assurance tolerances for the recommended approval in this report are:

<b>Assurance tolerances</b>
Combined Authority funding remain within +10% of those outlined in this report.
Completion/service delivery date remains within +6 months of those outlined in this report.
Outputs remain within -10% of those outlined in this report.

### **Appraisal Summary**

- 4.26 The project presents a strong case for change in terms of the depleted state of the catchment's biodiversity and its inability to contain water. There is a clear case for investment to enable a suite of natural flood interventions to be made in partnership with landowners and local volunteers. This will enrich the environment for nature and people whilst reducing flood risk in the lower reaches of the Beck. Four incremental options are proposed in the business case, and the preferred way forward is realistic and will employ two dedicated catchment officers to deliver a step change in land management knowledge and practice locally.
- 4.27 Landowners will be responsible for the ongoing upkeep of interventions on their land. Procurement for contractors working on public land will be through established routes at Leeds City Council and for landowners through the online Nature Bid tool that will enable selection of contractors through competitive bids for specific work packages. There will also be support for landowners on grant applications towards costs where they are appropriate.
- 4.28 Delivery of the project will be through a partnership agreement that is yet to be finalised between the Yorkshire Wildlife Trust and the Environment Agency. There will be a Project Board meeting monthly in the initial stages of the project as it becomes operational to manage the risks early on. There are comprehensive stakeholder engagement plans using learnings from previous NFM projects in getting landowners onside. The EQIA now requested as a condition of approval will complete the picture of how the project will be delivered with success.

## **Recommendations**

- 4.29 The Combined Authority, subject to the conditions set by the Programme Appraisal Team approves that:
- (i) The Wortley Beck Re-naturalisation scheme proceeds through decision points 2 – 4 (business justification) and work commences on activity 5 (delivery).
  - (ii) Approval to the Combined Authority's contribution of £966,000 is given. The total scheme value is £1,000,000.
  - (iii) The Combined Authority enters into a Funding Agreement with the Environment Agency for expenditure of up to £966,000.
  - (iv) Future approvals are made in accordance with the assurance pathway and approval route and tolerances outlined in this report. Where required any future committee level approvals are delegated to the Climate, Energy and Environment Committee.

## **Projects in Stage 2: Scheme development**

- 4.30 There are no schemes to review at this stage.

## **Projects in Stage 3: Delivery and Evaluation**

- 4.31 There are no schemes to review at this stage.

## **5 Tackling the Climate Emergency implications**

- 5.1 The Climate Emergency implications have been considered on all projects included in this report as part of their business case development.

## **6 Inclusive Growth implications**

- 6.1 The inclusive growth implications have been considered on all projects included in this report as part of their business case development.

## **7 Equality and Diversity implications**

- 7.1 Equality Impact Assessments (EqIA) have been undertaken on all projects included in this report as part of their business case development.

## **8 Financial implications**

- 8.1 The report seeks endorsement to expenditure from the available Combined Authority funding as set out in this report.

## **9 Legal implications**

- 9.1 The payment of funding to any recipient will be subject to a funding agreement being in place between the Combined Authority and the organisation in question.

## **10 Staffing implications**

- 10.1 A combination of Combined Authority and local partner council project, programme and portfolio management resources are or are in the process of being identified and costed for within the schemes in this report.

## **11 External consultees**

- 11.1 Where applicable scheme promoters have been consulted on the content of this report.

## **12 Recommendations (Summary)**

### **Wortley Beck Re-naturalisation Scheme**

- 12.1 The Combined Authority, subject to the conditions set by the Programme Appraisal Team approves that:
- (i) The Wortley Beck Re-naturalisation scheme proceeds through decision points 2 – 4 (business justification) and work commences on activity 5 (delivery).
  - (ii) Approval to the Combined Authority's contribution of £966,000 is given. The total scheme value is £1,000,000.
  - (iii) The Combined Authority enters into a Funding Agreement with the Environment Agency for expenditure of up to £966,000.
  - (iv) Future approvals are made in accordance with the assurance pathway and approval route and tolerances outlined in this report. Where required any future committee level approvals are delegated to the Climate, Energy and Environment Committee.

## **13 Background Documents**

- 13.1 None as part of this report.

## **14 Appendices**

- 14.1 [Appendix 1 - Wortley Beck Re-naturalisation Business Case Summary](#)