

Nature4Water Warwickshire Avon FAQ's

Finance	
<p>Q. Are you proposing that investors will generate income and return on investment because of the NBS benefits?</p> <p>Or, is the return on investment a societal benefit?</p>	<p>A In this context it is important to distinguish between financial returns and economic benefits. The full return predicted in our assessment (£2.5 per £1 spent for the modelled area, £2.7 per £1 predicted for the full Avon region) is not directly received by an investor in form of financial gains - it's a wider economic benefit for the region. This estimate is conservative and economic benefits are likely to far exceed this number.</p> <p>Having established that, generating financial return for investors (i.e. creating bankable NbS projects) is a possibility and one of several avenues the N4W partnership will explore in greater detail in the next phase of work to be trialled through pilots (start-up phase).</p> <p>Nature Markets, could represent an opportunity to generate financial return for investors. Warwickshire County Council (a core partner in this project) investigated this aspect through a separate Natural Environment Investment Fund project. We are taking learning from that into this work.</p> <p>It is also important to note that the wider economic benefits we estimated are not just societal/environmental in nature but have tangible, and short-term economic impacts. For example, the flood benefits (£37 million) are direct cost savings due to avoided flood damages. Further, carbon credits from sequestration activities could generate substantial income to farmers/landowners/project investors, with a catchment-wide benefit estimated at over £300 million. Similarly, the creation and sale of Biodiversity Net Gain units is valued at around £200 million. Air quality improvements may also offer monetisable value, though this remains a less mature market than carbon. The programme's water recharge benefits could also attract companies with water replenishment targets - such as those in the food and beverage sector - offering monetisation opportunities through the sale of water replenishment credits.</p> <p>Other options to fund projects on the ground, include the Government's agri-environment</p>

	<p>schemes and public funds available for landscape recovery, or private grants. We want to explore and combine these approaches.</p> <p>The approach to funding an intervention will need to be assessed on a case-by-case basis to understand the potential to generate revenues and identify the most effective funding mechanisms.</p>
<p>Q Do the economic models include any financial contribution to landowners, eg. woodland creation grants or is it just capital implementation costs?</p>	<p>A The economic models are based on the creation and maintenance of the Nature based Solution interventions (e.g. pond creation or hedgerow planting) based on a 30-year index linked time frame. The delivery of the work could be done by landowners or partner organisations (so landowners could benefit if they deliver). Depending on the source of the funding for the interventions (avoiding double counting) it should also be possible to 'stack' benefits for landowners. So, once installed the interventions could be incorporated into agri-environment schemes or other future green investment schemes, but these income sources do not form part of the economic modelling of this project.</p> <p>Where Nature Markets are involved in the creation of the Nature based Solution then landowner financial contributions should be considered.</p>
<p>Q How does this investment programme align to other initiatives such as the Projects for Nature DEFRA platform, West Midlands Combined Authority LINC programme or River Severn Partnership?</p>	<p>A We have designed the Nature4Water Warwickshire Avon programme so that it can either operate as a standalone model or be integrated into a wider regional or national initiative. It would plug into a wider initiative as a localised component that provides highly authentic evidence-based ROI.</p> <p>The N4W Warwickshire Avon programme could become a key delivery mechanism to help achieve the wider goals of other initiatives, serve as a more localised testing ground, and support delivery against wider strategies (such as the LNRS).</p>
Delivery	
<p>Q How will this project link to local Flood Action Groups or other community groups working across this region?</p>	<p>A The core partners are members of the catchment partnership and have existing relationships with these groups. We welcome these groups to contact us to discuss further how we can link to the work of these groups.</p>
<p>Q Will soils be part of the delivery of this project as they can play a big role in water resilience?</p>	<p>A The modelling and analysis focussed on the main nature-based solutions typically delivered through projects in the area currently. That provides the most accurate cost profile for</p>

	scaling up. Soil management is a critical element of water resilience and can play a key part in the delivery of this work through landowner engagement, but it didn't form part of the analysis.
Q Have Local Authorities (district and boroughs) been involved in the development of the project and how can they play a role in the delivery?	A Local authorities are key partners in this project as they have responsibilities to their citizens in relation to water resilience, whilst also being landowners and potential delivery partners. We are aiming to embed the Nature4Water programme into local authority policy frameworks. The emerging Local Nature Recovery Strategy for Warwickshire will integrate the opportunity mapping of this work and will link to this in relation to water.
Q Is Sustainable Urban Drainage (SUDS) included in this project?	A No, the programme focusses on upstream interventions in rural areas (headwaters). Whilst SUDS have a role to play in water resilience they were not factored into the modelling or delivery of this programme.
Modelling and Analysis	
Q Has Computational Flow Modelling techniques been used to determine the effect of proposed changes and the impact on surrounding areas?	A The chosen flood model, was an event-based, hydrological model of peak flows called HEC-HMS.
Q Is this project in combination with engineered solutions or just Nature based Solutions on their own?	A The assessment, including the science/technical and economic/financial analysis solely focused on Nature based Solutions.
Q What is the main mechanism of the phosphate reduction used in the modelling?	A There is extensive literature available publicly around the phosphate reduction mechanics of nature-based solutions. Multiple mechanisms were used to model the reduction of phosphate into waterways. These included removal via bunds / ponds (wetlands) delivered on flow pathways and significant uplift from the delivery of land use change (reduction of phosphate input).
Q Are the full benefits assumed to begin immediately after scheme implementation?	A A benefit curve was factored in based on vegetative growth where applicable, meaning that benefits were slightly delayed to account for the need of vegetation to establish itself
Q Is the data behind the financial business case and modelling available for the public to see?	A A summary of the business case is available here https://www.warwickshirewildlifetrust.org.uk/nature4water and a full Technical Report can be made available on request.
Q How will you report on the progress of the project and share the data on the impact when work gets under way?	A A more detailed delivery phase plan is to be worked up as part of the next phase of the project planning. At this stage of the thinking the broad aim will be to capture outputs and outcomes from work delivered both geo-spatially (via mapping) and through monitored evidence gathering (conducting baselines and then monitoring changes in key metrics). The longer-

	term ambition will then be to communicate this impact back to investors and the wider public to demonstrate impact.
Q Did you look at social prescribing benefits and access to some of these locations? (if they lie along footpaths) - ICB/NHS data, the Contemplative Landscape Model is a very basic tool which is used to grade landscapes.	A Access to nature has been explored within the project and is a key aspect of compatible and complementary strategies such as the Local Nature Recovery Strategy.
Q Have you measured what the impact on growth (and financial stability) will be if we do not invest in water resilience?	<p>A The economic modelling is not tied to a more general economic growth model for the UK. The programme however shows the generation of socio-economic benefits including green jobs (employment) and natural capital. These represent the growth of services provided to the region by nature. These gains are unlikely to occur without coordinated investment in water resilience.</p> <p>Some of the modelled benefits from investment into water resilience (see Q1) impact growth. Flood risk benefits represent saved costs that are otherwise predicted to occur. The generation of green jobs and expanded nature markets would also be expected to contribute to economic growth.</p> <p>More generally, water is essential to all activities in the region, long term growth therefore needs to be underpinned by ensuring water resilience, something that this programme can help deliver. We would welcome conversations on ways we could establish this link, understand the future demands for water and how to encourage investment that facilitates the region's growth.</p>
Partners and stakeholders	
Q Our organisation isn't involved in this project yet, but it sounds great. How do we get involved?	A Contact us at nature4water@wkw.org.uk for an introduction and we can discuss together how you can best support.
Q Which councillor is leading on this at Warwickshire County Council?	A This work is part of the Council's Environment portfolio, which at time of writing is Cllr Darren Cheshire.
Q Does a Community Forest or the new National Forest cover the catchment? If not how will tree planting work?	A No, the Heart of England Forest (an NGO) covers part of the catchment and it has aspirations to plant trees across the area it is focussed on. HoEF are a collaborative partner in this project already. However, tree planting is not restricted to the land the HoEF covers and will be targeted where data modelling identifies the greatest impacts.
Q Will Parish Councils be involved in this project?	A The existing partners want to expand the partnership and are interested in speaking to parties from across the Avon about what their involvement could and should be.

<p>Q How much engagement has there been with landowners about the practicalities and appetite for doing the things proposed?</p>	<p>A In Warwickshire there are 3 Farm Cluster Groups that bring groups of farmers together to share best practice and exchange knowledge. The partner organisations leading this project support those Farm Cluster Groups and in addition to that provide 1-1 advice and support to farmers on issues ranging from pollution reduction to agri-environment grant applications. As such we have a network of farmers and landowners that we talk to on a regular basis. Ultimately, these types of projects will only be successful if we can find a way to make them work for the farmers and landowners that host the interventions. That is why our support and engagement for farmers and landowners goes beyond this project to create a more sustainable future for the people of Warwickshire.</p>
<p>Q The Warwickshire Avon actually goes into Northamptonshire, Leicestershire and Worcestershire. How does this project work in those areas?</p>	<p>A The intention is for the programme, in its fully expanded form, to cover those areas. For the business case, more detailed assessment was carried out for the River Leam area. This was then extrapolated to the full business case opportunity for the full region. There are opportunities for landowners, investors and delivery organisations to support work in those areas and contribute to the impact of this project. The existing partners already work closely with neighbouring counties and there are established routes of communication for agreeing delivery priorities when needed.</p>
<p>Q What scope is there for children and young people to engage with this work? Either in the form of awareness- or in terms of apprenticeship and skills development in water stewardship?</p>	<p>A All of the partners recognise the importance of young people and future generations in this work. Ultimately the benefits that will be derived will benefit them and involving them in the design, development and delivery will make the project more impactful. We will be exploring how we can use our existing organisational apprenticeship and skills development schemes to support this project and will be actively considering how we can utilise initiatives like those as the scale of work grows.</p> <p>At this point in time there is no dedicated schools/engagement programme as delivery focusses on the societal benefit outcomes delivered through the Nature based Solutions themselves. However, this area of work could form part of the evolving strategy of this work overtime.</p>
<p>Q Have you factored beavers as ecosystem engineers into the modelling and are there plans to introduce beavers as part of this project?</p>	<p>A The positive Nature based Solution benefits that beavers deliver were not modelled as part of this work as they are too complex. However, it is recognised that if Beavers were present in the catchment they could play an active role in</p>

	<p>delivering many of the interventions modelled in a cost-effective way. Their presence in the area would significantly increase the societal Return on Investment which is already £2.70 of benefits for every £1 invested.</p> <p>There are no plans to reintroduce beavers as part of this project. However, now that the wild release of beavers is permitted within legislation and several neighbouring counties have wild beaver populations in place it is likely that beavers will be present in the Warwickshire Avon in the decades to come. When that occurs and technology progresses further it will be possible to recalculate the societal benefits delivered through this work to demonstrate even greater returns on investment.</p>
Q Where do you see the opportunities for innovation and bringing in new businesses to support this approach?	A The project itself is pioneering and the impact it could have would demonstrate innovative solutions to societal challenges. There is more scope beyond that to further incorporate innovation and technology in the form of AI analytics and eDNA sampling of species to monitor and record biodiversity improvements. The opportunity to secure finance from a new range of investors provides further potential for innovation as we learn what requirements they need in order to support the work and deliver that.
Q How do you know who the landowners are within the area?	A There are 3 farm clusters that cover the area, which collectively have over 150 farmers engaged. The partners support these farm clusters and then through other strands of work also work with additional landowners on other projects. As momentum builds in the project we expect that word of mouth and peer-peer referrals will play a big part in its success too.
Future Plans	
Q What is the plan going forward?	<p>A Our business case summary identifies a two-stage process to scale up the partnership's membership and operations.</p> <p>The first phase, aims to expand and formalise the partnership, identify and implement an appropriate governance structure and secure a long-term funding strategy. An initial pipeline of NBS in the Avon region will be delivered in this period to support the development of the programme's ways of working. This phase requires £4M additional funding to deliver.</p> <p>The programme will then be scaled up after this start-up phase.</p>

<p>Q Will you build individual organisation (beneficiary-specific) business cases to gain buy in and investment in the NbS programme/interventions planned?</p>	<p>A Organisations could benefit from improved water resilience from this programme in their supply chain, mitigating impacts on their land or via supporting their ESG initiatives and customers.</p> <p>We are flexible in terms of our approach to developing a sustainable funding model to deliver the programme, aiming to use the start-up phase to identify the best approaches to doing this.</p> <p>Beneficiary specific business casing is one such approach that we are open to exploring. To help us do this, we encourage organisations in the region to contact us to share their water related challenges, how this programme could support managing their risks and what a business case would need to incorporate for their needs.</p>
<p>Q What should I do if I'd like to learn more about this work?</p>	<p>A Contact us at nature4water@wkw.org.uk</p>

