



Watercress and Winterbournes

Landscape Conservation Action Plan (LCAP) – Part 1



Hampshire & Isle of Wight
Wildlife Trust



Wessex
Chalk Stream
& Rivers Trust



Salmon & Trout Conservation
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Environment Agency



Hampshire County Council



A clear solution for farmers
CATCHMENT SENSITIVE FARMING





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Executive Summary

Famed for both its world-class fly fishing and its watercress industry, the Watercress and Winterbournes landscape is defined by its spring-fed chalk streams and their seasonal winterbournes. These streams have been harnessed and lived alongside for thousands of years, shaping and being shaped by human activity. This has created a unique landscape that is a product of human as well as natural history. From the development of the first settlements the chalk streams have supplied us with drinking water, and they have long been used for business and recreation. They are an integral part of the landscape and our natural heritage – our history, culture, geography, economy, and ecology.

The Watercress and Winterbournes Landscape Partnership Scheme has its roots in the Test and Itchen Catchment Partnership, a collaboration involving statutory organisations, NGOs, fishing interests and landowners. Watercress and Winterbournes builds on this earlier partnership, but takes a new approach by putting communities at the heart of plans to restore and care for seven globally-important chalk streams. The Scheme focuses on involving and empowering communities within the Watercress and Winterbournes area to prioritise, plan and deliver their own chalk stream projects.

Extensive collaboration with our Community Catchment Groups during the Development Phase of this Scheme has resulted in worked-up project proposals for all seven of the catchments, which will address the communities' main priorities. These range from access improvements to communities surveying the chalk streams to improve their understanding. These projects mesh well with the wider strategic projects developed by the catchment partners, and all contribute to the Scheme's vision and objectives. We have been inspired by the commitment and enthusiasm shown by the Community Catchment Group members and look forward to working alongside them through the Delivery Phase.

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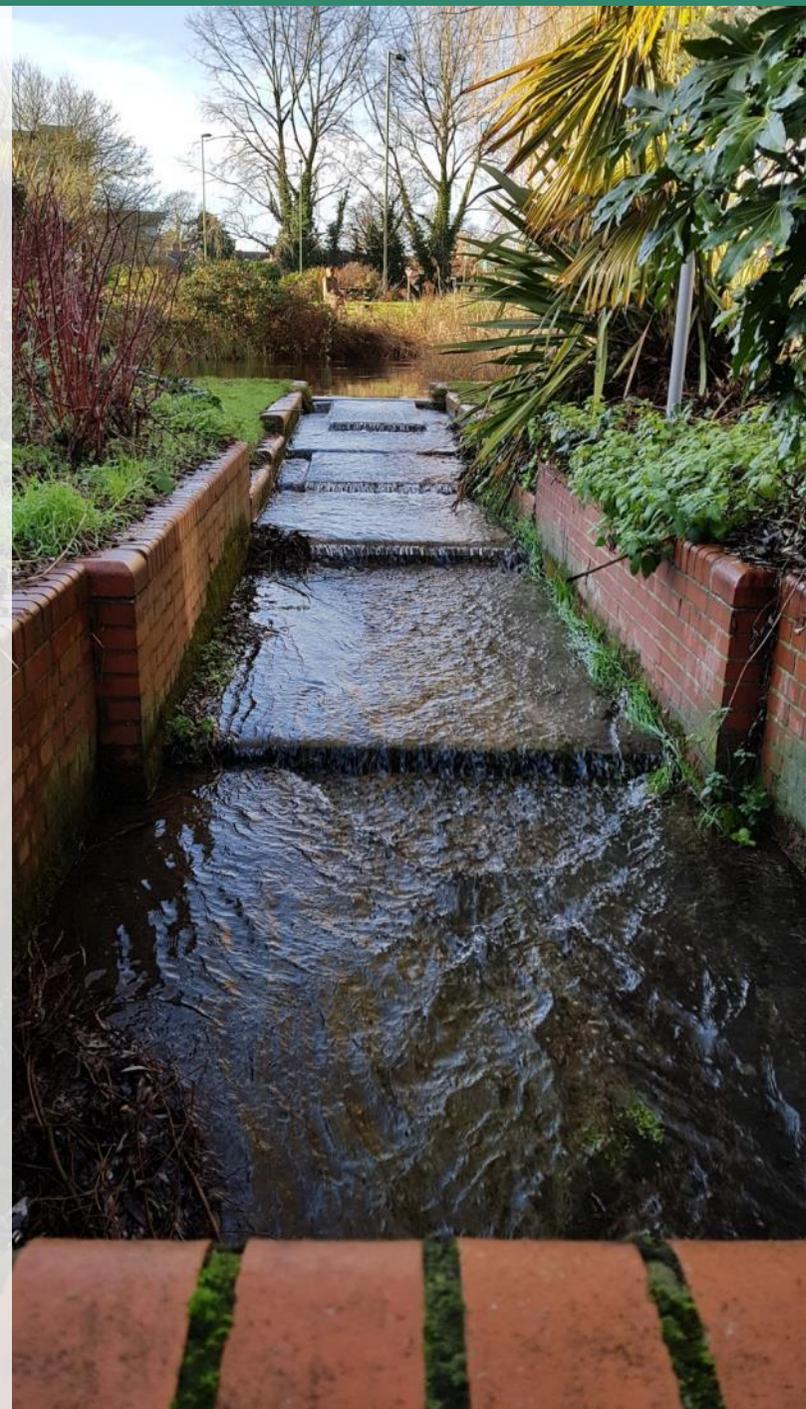


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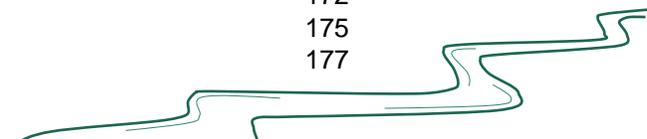
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Introduction

The Watercress and Winterbourns area is one which is defined by its chalk streams, their valleys, and the natural underground reservoirs which feed them. The 683km² area is located in north Hampshire (Figure 1) and encompasses the headwater streams of two of the UK's most iconic chalk rivers: the Test and the Itchen.

The seven headwater chalk streams (Pillhill Brook, Upper Anton, Bourne Rivulet, Upper Test, Candover Brook, River Arle, and Cheriton Stream) are the tributaries that carry water from the sources down to the main rivers. They total 85km of chalk stream and their health is critical to maintaining the health of the two main rivers.

Our Landscape Partnership uses the catchments of the seven chalk streams as our boundary (Figure 2 over page). These are defined by topography and indicate all of the land which ultimately drains into the seven streams. The floodplain areas shown in blue on the map on Figure 2 are where most of the capital works to improve the chalk streams and their surrounding habitats will be focused.

Wider land management and community involvement activities will be delivered throughout the Scheme area, in recognition of the fact that many of the issues faced by our chalk streams are the result of wider land management issues.

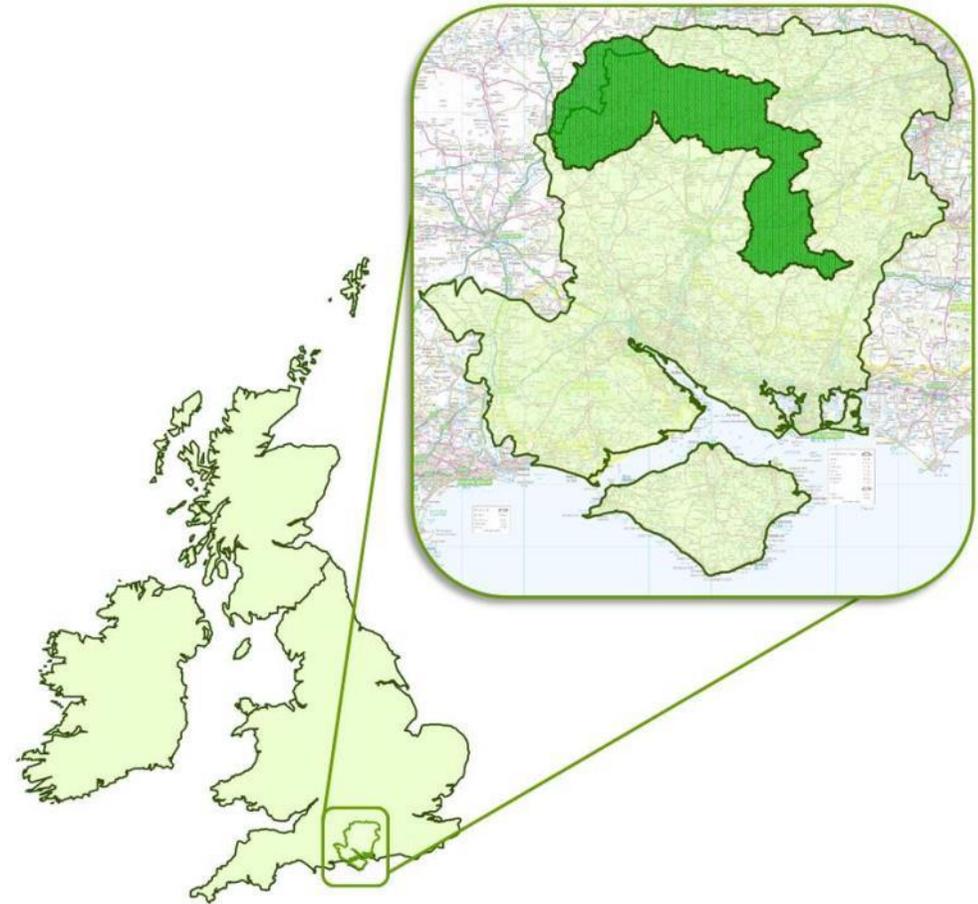


Figure 1 Where Watercress and Winterbourns is located in the UK and within Hampshire

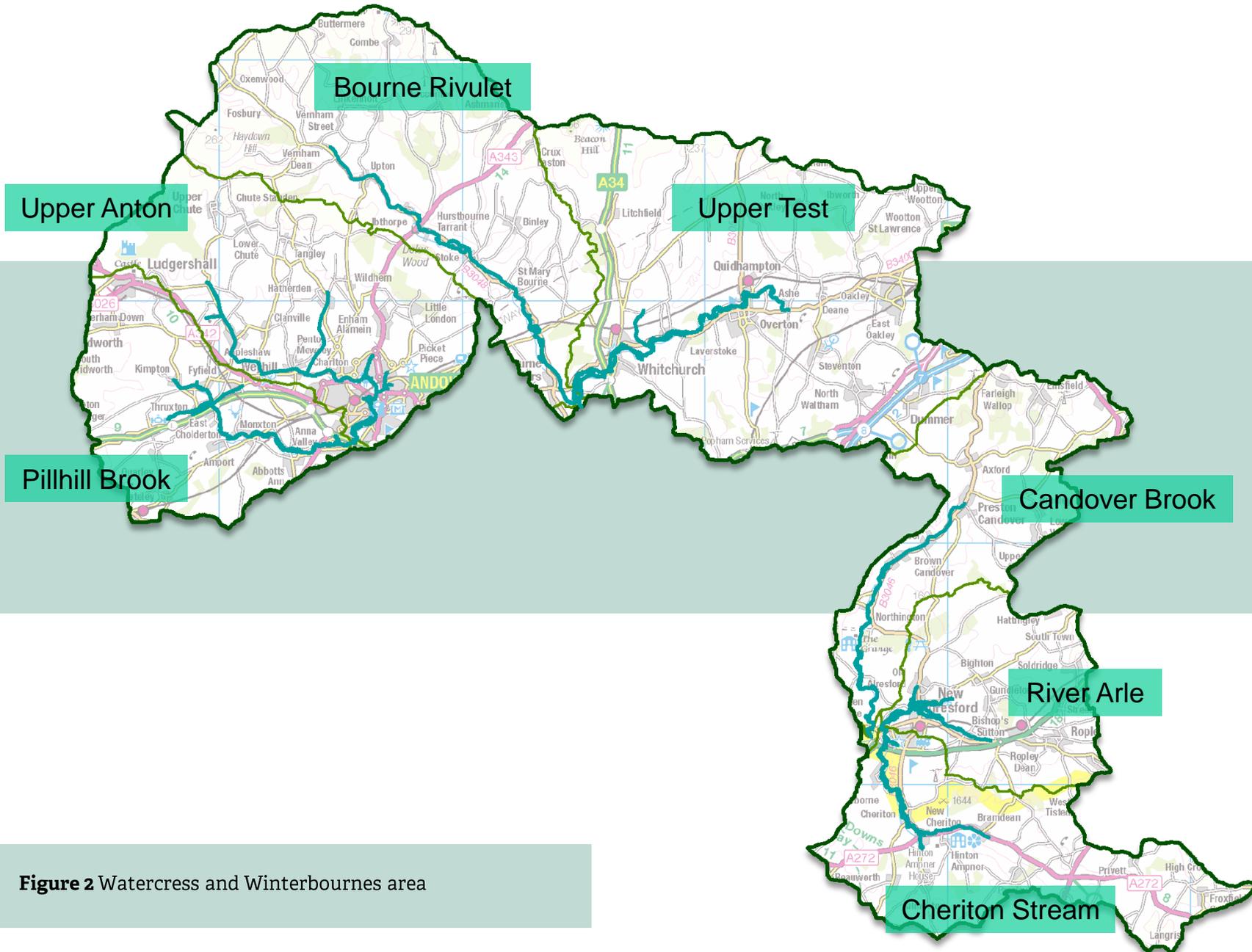


Figure 2 Watercress and Winterbournes area

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Participation and consultation

A wide range of organisations and individuals have participated, in and been consulted on, the development of Watercress and Winterbournes. Community Catchment Groups have taken a leading role in proposing, prioritising, and developing the projects, and this has been influential in shaping the Scheme.

How our LCAP is presented:

Part 1:

Part 1 contains a description of the landscape, its history, its people, why it matters and to whom, the threats and opportunities for the chalk streams, and the Scheme's response to these issues.

Part 2:

Part 2 contains detailed proformas with plans for each of the 20 projects that make up Watercress and Winterbournes. Together these provide an overview of all the works and activities that will be implemented during the Scheme.



Photo credit: Maggie Shelton



Section 1: Understanding the Watercress and Winterbournes area

1.1 Natural heritage and landscape character

The Watercress and Winterbournes area is quintessential southern England, and is covered by a comprehensive and relevant Integrated Character Assessment published by Hampshire County Council and Natural England's National Character Assessment for the Hampshire Downs (extracts in **Appendix 1**). These consist of mapped landscape types and descriptions that form the basis for characterising the landscape heritage of the Scheme area.

These assessments provide a strong foundation of knowledge about the Watercress and Winterbournes area, which we have continually built upon throughout the Development Phase. The insight of the local communities, in addition to our own interactions with the landscape, have enabled us to form a comprehensive understanding of this unique environment.

***"Once, on a May morning a few years ago, I came out on to the banks of the Upper Itchen, at Ovington in Hampshire, and the river with its flowers and willows and the serenity of its flow and its dimpling trout in its matchless, limpid water, all gilded by the sunshine, seemed to possess a loveliness which was not part of this world at all."** - Michael McCarthy, The Moth Snowstorm*



1.1.1 Geology and hydrology

The Watercress and Winterbournes area is a soft and subtle landscape of undulating farmland, gently sloping valleys, scattered woodland, and floodplain wetlands. Its bedrock is composed of white chalk - a type of calcium-rich, alkaline limestone formed more than 60 million years ago. At that time the land was covered in a warm, shallow sea that swarmed with tiny marine plankton. Over time their remains accumulated on the seabed, slowly compressing into sedimentary rock that was exposed as the planet cooled and the seas gradually receded. This bedrock can be hundreds of metres thick, but due to its relative softness has been moulded by ice, wind, and rain into the rolling downs now characteristic of the area.

On these downs the chalk is either at surface level or overlaid with layers of clay and flint deposited by retreating ice age glaciers. In many places they form the sides of river valleys, nestled within which are lush water meadows and grasslands. Through these valleys flow additional products of the chalk bedrock: the rivers themselves. Chalk is highly porous and able to absorb large amounts of water, not unlike an enormous sponge; as such the bedrock forms an underground layer of water-bearing rock known as an aquifer. When this is saturated the water stored within (at that point referred to as 'groundwater') re-emerges on the surface in the form of springs – these are the beginnings of the area's iconic chalk streams.

In the lower parts of the landscape the chalk streams are usually perennial, meaning that they flow constantly throughout the year. In the higher parts, however, they are often intermittent 'bournes' that only flow when there has been enough rain to saturate the aquifer. Those which need the high rainfall of the winter months to flow gain the name 'winterbournes' – some of these follow a reliable annual cycle, while others will only appear during the wettest years. In such years the streams may even overflow, turning the adjacent land into wet floodplain habitats. In this way the very foundations of this landscape shape its unique character: the aquifer feeds the springs, which feed the chalk streams, which feed the Rivers Test and Itchen. This relationship is reflected in the flow of the rivers: water levels are highest in late winter and early spring, when the groundwater in the aquifer has been boosted by increased rainfall, and lowest in late summer and early autumn, when rainfall is decreased and the groundwater has been depleted.

Much like the landscape that holds it, the groundwater also presents a window into history. It can take decades to percolate through the aquifer, so pollutants introduced many years ago are still emerging on the surface today. The only solution is time and careful management of the landscape to prevent further pollutants from entering the system. This is especially important as the area is prone to localised flooding and has fissures in its chalk bedrock – these combine to introduce pollutants into water on the surface and quickly transport it to the aquifer below. Moreover, with a local population largely dependent on the aquifer as a source of drinking water, an increased level of pollutants in the groundwater represents a hazard to humanity and wildlife alike.

1.1.2 Wildlife

The journey of groundwater through the chalk bedrock imparts special qualities that combine to make it uniquely attractive to wildlife. Passing through the aquifer lowers the water's temperature, introduces minerals, and filters out many impurities, so that it re-emerges on the surface cool, clear, and alkaline. The resulting chalk streams therefore offer rich, stable habitat capable of supporting a wide range of species, many of which are vulnerable or rare.

Chalk streams provide optimal habitat for many of England's iconic and indicator species. The basis of this complex food chain is a rich aquatic plant community, which thrives submerged in the channel or protruding at the margins. Species like river water-crowfoot, common water-starwort, watercress, and lesser water-parsnip provide food and shelter from predators. They are an ideal environment for the larvae of mayflies, dragonflies, and southern damselflies (Picture 2), which in turn feed other insects, fish, birds, and bats. Alongside them you can find Atlantic salmon, brown trout, bullhead, brook lamprey, and freshwater eel.

The clean, gravelly stream beds, scoured and oxygenated by the water's flow, are also habitat for insects, as well as essential for the successful spawning of fish. In a few parts of the area the rare white-clawed crayfish can still be found hiding under large rocks, and this ecosystem also supports aquatic mammals like otters and water voles. The surrounding floodplains of most chalk streams contain wet grassland and fen, and are of great importance for breeding wader birds and wintering wildfowl. Many of our chalk stream species make use of both the stream and the adjacent floodplains, and therefore require these two habitats to be properly connected in order to make their homes in the area.

Due to the unique geography and geology needed to form chalk streams, they are vanishingly rare on a global scale. While their prevalence in Hampshire creates the impression of abundance, in reality there are only around 200 worldwide, 85% of which are in England. This scarcity makes them more precious but also more vulnerable – many of the species they support are unable to thrive in other habitats, and face grave consequences if their homes are not in good condition. Some aquatic insects, for instance, have lifecycles that are specially adapted to the unique patterns of their chalk stream habitats; they lay drought-resistant eggs just as the flows subside, which develop into larvae just in time to hatch when the waters return.





1.2 History and cultural heritage

The story of the landscape in the Watercress and Winterbournes area is defined as much by human persistence as by the titanic forces of nature. The chalk streams, and the floodplains that embrace them, are peppered with the echoes of a relationship reaching back into prehistory and forwards into an unknown future.

There is evidence of human activity in the area as early as 700,000 years ago, during the Palaeolithic Period, but the first evidence of long-term settlement and modification of the landscape dates to the Neolithic Period. There was much to attract these early inhabitants – the valleys held fertile soil, lush vegetation, and easy access to clean water, while the nearby downs promised sanctuary from flooding. During the subsequent Bronze and Iron Ages the chalk downland and river valleys saw some of the greatest concentration of activity in the county.

This adaptation of the landscape for agricultural purposes further increased under Roman occupation. Urban development in the vicinity focused on nearby Venta Belgarum (later Winchester) and Calleva Atrebatum (now near Silchester), but some of the trade routes would likely have passed through the Watercress and Winterbournes area. A number of new villas with their own farm estates were established in the river valleys themselves, although many were ultimately abandoned as their Roman owners left Britain.

In the Anglo-Saxon period settlement was initially focused on the downs, but gradually shifted towards clusters of dwellings in the river valleys. These 'nucleated villages' consolidated existing hamlets and farmsteads, with some of the greatest concentrations in Hampshire located around what is now Andover and in the upper valleys of the Rivers Test and Itchen. The Domesday Survey of 1086 reported that the population and agricultural wealth of the county was focused on the river valleys.

By the time of the Norman Conquest this pattern of settlement was mostly established, and the dominance of the new ruling class was expressed largely through the addition of castles, cathedrals, monasteries, and churches. The prevalence of royal and ecclesiastical ownership resulted in further moulding of the landscape throughout the Medieval Period, with the addition of fishponds, chases, and deer parks - Hurstbourne, Laverstoke, Hinton Ampner, and Tichborne all originating as the latter.

“From a distance water meadows look unkempt and uninviting, but once you get into them they have a beauty all of their own, with a myriad grasses, flowers, and stunted shrubbery growing in an apparently irregular pattern.” - Simon Cooper, Life of a Chalk Stream

During this time the open field systems in the river valleys, laid out during the Anglo-Saxon period, began to be enclosed through informal agreements - in some places the resulting 'ladder' pattern extending up the valley sides can still be seen today. As the population increased through the 12th and 13th centuries, forested areas further from the river valleys were cleared for additional settlements, although many were consolidated into larger farms following the 14th century plague epidemics.

The next significant modification made to the landscape was in the early 17th century, when wet meadows began to be formalised into the water meadows that are so prominent today. Earthworks and channels, along with mechanical structures such as sluice gates, allowed specific areas to be flooded or drained at will - this characteristic is what distinguishes them from floodplains or other naturally flooded areas. This method of irrigation, called 'drowning', moved fresh water across the meadow's surface; this prevented stagnant pools from forming and the ground from freezing. As such, the water meadows could produce lush vegetation ideal for grazing livestock and making hay. Many were later adapted for growing watercress, some of which are still in operation today.

The mid- to late- 19th century saw the construction of new railway lines, which facilitated the development of the rural economy. Of particular note is the Mid-Hants Railway, usually known as the Watercress Line, which was built in 1865 to connect Alton with the Southampton-London line just north of Winchester. It passed through largely rural areas, with Alresford the only sizable settlement on-route, and became an important means of transporting locally grown watercress to the markets in London. Today, the railway operates regular services with the help of local volunteers, and is a popular tourist attraction.

Over the centuries some villages grew into market towns, especially where different watercourses converged or river crossings were established. Andover was originally a small market town, but expanded significantly during the 17th and 18th centuries to become an important refuelling stop and trade hub. In 1813 it became home to Taskers, a metal works set up in the suburb of Anna Valley in order to exploit the Pillhill Brook as a source of power; among other items, the company produced many of the mechanisms for operating the local water meadows. Today Andover is the largest settlement in the Watercress and Winterbournes area and has a very distinct character - its relatively large population means that much of the wider floodplain is occupied by housing, retail, amenities, and utilities such as sewage treatment works. Despite this growth, the chalk stream that runs through the town remains highly valued by the local population.

Alresford also developed into a trading and industrial hub for the area around the River Itchen headwaters, as Andover did for those of the River Test. In the early 12th century the incumbent Bishop of Winchester ordered the construction of a weir on the Arle chalk stream, thereby forming Old Alresford Pond; this created a head of water to power mills further downstream and facilitate navigation by boat, as well as providing a fish pond for the area. The construction of the weir also contributed to local trade by providing access to the main Winchester-to-London road and creating a more direct route to Southampton by drying out the adjacent floodplain. Alresford's main source of trade was initially sheep and corn, but when these declined in the 19th century the town moved on to watercress growing on an industrial scale, which is still active today. Accordingly, as in Andover the local chalk stream has retained its importance to the population even though the town has grown.

1.2.1 Fly fishing

The chalk stream headwaters of the Rivers Test and Itchen are internationally renowned as the birthplace of fly fishing, and today there are numerous private fisheries and angling clubs scattered throughout the Watercress and Winterbournes area. This is an important industry that attracts visitors from all over the world; the more informal management and twisting nature of the valleys creating a relatively intimate and 'wild' feel compared to the fisheries on the main rivers.

Encouragingly, interest in so-called 'wild fisheries' appears to be growing – these are fisheries that neither stock nor feed their fish, and instead endeavour to maintain the chalk streams in as natural a state as possible. Arle Fishing, and other local fisheries that are adopting this practice, demonstrate how an important industry can be maintained alongside developing understanding of good habitat management.



1.2.2 Water meadows



Described by Historic England as ‘one of the greatest achievements of English agriculture’, water meadows have been central to the culture and economy of the Watercress and Winterbournes area for more than 400 years. Most of the water meadows in the area fell out of use from the late 19th century onwards due to changing agricultural practices – a process accelerated by the Second World War. Today their historic value is matched by their potential environmental benefits, as when properly managed they have the ability to contain flood water, trap silt, and reduce the nutrient load in water returned to the chalk streams.

A Hampshire County Council survey carried out in 2000 showed that there are significant water meadows within the Watercress and Winterbournes area, but that many of these were redundant and in poor condition. This is supported by an additional survey undertaken as part of the Scheme’s Development Phase, which identified 10 water meadows not recorded in the earlier survey but also several that had since been destroyed.

1.2.3 Water mills

Use of the local chalks streams for power has been recorded as far back as the Domesday Book, the reliability and steadiness of their flow making them especially good at powering water mills. These were initially used primarily for grinding corn, but as industry developed more specialised uses were found, such as the Fulling Mill at Alresford which cleaned and thickened woollen cloth. Today many of these mills have become derelict or been converted into private residences, but a few significant buildings retain something akin to their original purpose including the Silk Mill in Whitchurch (now a museum) and Laverstoke Mill (now the Bombay Sapphire distillery).

The water mills are interesting not only for their industrial impact but also for the stories of their owners, such as that of Henry Portal. A French Huguenot fleeing religious persecution, Henry arrived in Southampton with his family in the late 17th century. He began working at a local paper mill and swiftly learned the trade, going on to establish his own paper production business at Bere Mill near Whitchurch in 1710. By 1718 he was able to acquire Laverstoke Mill, and transformed it into one of the most successful of its kind in the country. The quality of his paper was such that Henry was able to secure the contract to produce paper for the Bank of England bank notes – this contract was held by his descendants for 250 years before the company was finally sold, during which time the company opened another, purpose-built mill in Overton.





1.2.4 Watercress growing

A member of the mustard family, watercress is an aquatic plant that can be found along stream banks and thrives in cool, flowing water. It has been used as a foodstuff since Roman times, and was a staple of the working class diet in Hampshire during the 19th century because it could be picked straight from the streams and used to fill sandwiches.

It was around the same time that watercress began to be commercially cultivated in England, and Alresford quickly became the crop's national capital. The subsequent construction of railway lines further benefitted this profitable local industry, and most watercress beds seen today are concrete constructions dating to this Victorian golden age.

The watercress industry declined during the 20th century as demand and prices became stagnant. The Watercress Line, which connected Alresford with the main line to London, was affected by railway changes during this period and eventually closed in 1973, making it more difficult to transport the local crop. By the 1980s around 90% of watercress growers had left the industry. Old watercress beds can be found scattered across the Watercress and Winterbournes area, and while some have been repurposed as community assets, as in the case of Laverstoke Pond, many more sit neglected and deteriorating.

Despite this, the area remains a stronghold for the watercress industry, albeit much decreased in size from its heyday. The methods of production have changed, mechanisation having become the accepted norm for all but a few traditional growers. Irrigation practices have also altered - the beds were initially fed directly from the chalk streams, and sometimes formed an integral part of the water meadows as can be seen in Cheriton. In the 1970s and 1980s, however, health concerns around liver fluke caused growers to drill boreholes in an effort to secure fresh, unpolluted water from the aquifer.

1.3 Literary heritage

The unique landscape character of the Watercress and Winterbournes area has had another striking effect: the sparking of literary creativity. Lifelong Hampshire resident Jane Austen spent the first 25 of her life in Steventon, near the Upper Test, where she penned the stories that would later become *Sense and Sensibility* (1811) and *Pride and Prejudice* (1813). Similarly, a fishing holiday spent on the Upper Test at Whitchurch inspired Charles Kingsley to write *The Water Babies* (1863).

The area also falls within Thomas Hardy's semi-fictional region of Wessex, the landscape of which is so central to his work that it is often deemed a character in its own right. Notably the historic fairground at Weyhill (given the alias 'Weydon Priors') was the setting for a pivotal scene in *The Mayor of Casterbridge* (1886).

The high quality of fly fishing offered by the chalk streams has resulted in many books on the topic. The influential politician Sir Edward Grey indulged his passion for nature at his cottage in Itchen Abbas, and was inspired to author several works documenting his experiences including *Fly-Fishing* (1899) and *The Cottage Book* (1909). Fellow politician John Waller Hills also addressed the subject with *A History of Fly Fishing for Trout* (1921) and *A Summer on the Test* (1924).

Perhaps the most famous work on the subject is Harry Plunkett Greene's *Where the Bright Waters Meet* (1924), which records the author's idyllic experiences of fishing the Bourne Rivulet at St Mary Bourne – today devotees come from around the world to fish the chalk stream, and visit Greene's grave in nearby Hurstbourne Priors.

In more recent years, the chalk streams have continued to provide a source of literary inspiration. Richard Adams, who was born in Whitchurch, immortalised the rolling downs and chalk streams of his home in *Watership Down* (1972), Simon Cooper records a year on the River Test in *Life of a Chalkstream* (2014), and Michael McCarthy dedicates a chapter to the River Itchen in *The Moth Snowstorm* (2015).



Illustration by Jessie Willcox Smith via Wikimedia Commons



1.4 The policy context

“Chalk streams are an English Okavango Delta, an English Great Barrier Reef, an English rainforest.” - Charles Rangeley-Wilson, A Tribute to Chalk Streams

The Watercress and Winterbournes area is peppered with designations that reflect and seek to protect its unique character. The western headwaters fall within the North Wessex Downs AONB, and the eastern edge within the South Downs National Park - both recognise the rural and tranquil nature of gently rolling downs punctuated by intimate river valleys. Local, national and international environmental designations capture the globally-rare chalk streams, as well as the floodplain wetlands and the woods and grasslands of the hillside slopes and plateaus. Priority habitat covers a fifth of the project area, with the mix of habitat types being key not just to the natural heritage but to the landscape character of the area. Listed Buildings, Scheduled Monuments, Registered Parks and Gardens and numerous Conservation Areas highlight the importance and diversity of the area's built heritage and landscaping, but most prominent within these are the rural villages dotted along the river valleys, populated by buildings rich in Hampshire vernacular (as signified by the proportion of Conservation Areas that encompass the rivers and their valleys).

Historically, efforts to protect the rivers and their ecology would have focussed on the channel, and perhaps the immediate floodplain, but whilst some pressures can be dealt with in this manner, there is an increasing awareness that a river system must be recognised as being inherently linked to, and affected by, its wider catchment. A landscape- (or 'catchment'-) scale approach must be taken in order to be alive to the pressures and opportunities that exist across the catchment as a whole, and this brings together the considerations of wider land management and of how water is used and managed.

The Water Framework Directive embeds this approach, requiring a holistic view to be taken of the needs of the freshwater environment; rivers, lakes and groundwater. The seven headwater chalk streams are 'waterbodies' under the terms of the Directive, meaning that the pressures affecting them have been identified, and targets set for the improvement of the chemical and ecological status of each. But the Directive requires not only this; it also demands that stakeholders are involved in local decision making and delivery. The 'Catchment Based Approach' (CaBA) is the UK's solution to this.

In Hampshire, the Rivers Test and Itchen are grouped to form the county's largest catchment partnership, considering collectively the two river systems and the groundwater resource that they share. Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust co-host the partnership and it is here that the Landscape Partnership Scheme has its roots. The role of a Catchment Partnership is to bring together all of the local stakeholders who have an interest in the catchment, and to prioritise and take forward action to improve its waters.

Taking a holistic approach to the issues facing the catchment's freshwaters naturally allows stakeholders to consider not just the state of the freshwater environment, but the other benefits that the catchment can provide (for example, contributing to the water supply utilised by Hampshire's residents), and the issues that are associated with it (such as the risk of flooding). It encourages these aspects to be considered as pieces of the same puzzle, as indeed they are.

It was this approach that led the partners to recognise the importance of the headwater chalk streams and to form the Landscape Partnership, namely that they are:

- Ecologically distinct from the rest of the river system, with winterbourne sections and rare winterbourne-specialist species.
- Cherished by the communities that live along them, who have more opportunity to be involved in their care and management than elsewhere in the catchment.
- Paradoxically less understood by many; the different ecology and unusual flow regime can lead to the winterbournes being considered less important than the permanently-flowing sections and consequently managed in a manner which can be damaging.
- Ripe for improvement; their smaller scale and less-intensive management offers restoration and enhancement opportunities not easily embraced on the main rivers downstream, and more able to involve volunteers.
- Critical to the health of the river system downstream.

The Landscape Partnership approach is essential for these chalk stream headwaters because, while a host of other initiatives exist that look to protect elements of the chalk stream landscape, none by themselves have been sufficient. For example, the Test & Itchen River Restoration Strategy focusses on the restoration of the SSSI-designated parts of the river system, which excludes most of the headwaters. Catchment Sensitive Farming operates in the area, working to embed water-sensitive farming practices across impacted catchments, but many forms or areas of rural land management fall outside of its remit or target areas. The Landscape Partnership looks to complement existing mechanisms in a holistic way to the benefit of the headwater environment. Crucially, the local communities, landowners, farmers, businesses, fisheries and volunteers will form the backbone of these efforts.

The Scheme builds in elements often not considered as components of river conservation projects, but recognised as crucial when taking a catchment-based approach. These include work on water efficiency to help communities reduce their pressures on the riverine landscape, and education and access opportunities, to further embed a love for and understanding of chalk streams in those who live and work along them, visit them, or own and manage them. It is this which sets Watercress and Winterbournes apart from previous approaches in the catchment, and which will be critical to its success.



1.5 Statement of Significance

Shown overleaf is a list of special features which make the landscape of the Watercress and Winterbournes area special and notable. However, this goes only partially describes why the headwaters are significant and worthy of landscape-scale action.

To truly understand this landscape it is necessary to consider three dimensions in space and one dimension in time: natural fluctuations of ground and surface water give rise to the winterbournes, and the natural and human heritage that has grown-up around them. The chalk aquifer gives life-blood to the landscape and its community as well as to the more famous but less fragile rivers downstream. It is a landscape that continues to be shaped by both geography and by human influence, and one that alters season-by-season.

Recognition of the inherent value of this landscape stems from locally, regionally, nationally, and internationally important features. This alone is a statement of their significance, but the threats and opportunities set out in Section 4 elevate the landscape even further because they highlight the fragility and threats as well as the potential and promise within it.

The Watercress and Winterbournes area spans a National Park, an Area of Outstanding Natural Beauty, and the 'white space' between but the whole is greater than the sum of its constituent designations. The landscape is utilitarian: a 'header tank' supplying clean water to millions; farmland helping the nation to feed itself; a place to live and work in, a place to enjoy and be restored in. Furthermore, it has a profoundly deep and unique character of global note.

	National Significance	Local Significance
LANDSCAPE CHARACTER	<ul style="list-style-type: none"> The Itchen headwaters around Cheriton fall within the South Downs National Park A swathe of the upper catchment of the R. Test centred on the Bourne valley lies within the North Wessex Downs Area of Outstanding Natural Beauty The area arcs across the Hampshire Downs National Character Area (NCA 130), forming the north-western edge and central spine 10 registered Parks and Gardens can be found, containing important areas of Parkland including at The Grange, Northington The fishing opportunities on the chalk rivers attract visitors from across the world and the sector is an important part of the rural community The chalk aquifer under the ground supplies all of the drinking water to customers in north Hampshire. In south Hampshire, 2/3 of supplies come from the Test and Itchen Rivers, with the headwaters providing a critical component of their flow. Over 1.5M customers are reliant upon the rivers & their aquifers in total. 	<ul style="list-style-type: none"> 73 water meadow units were identified through the project's Water Meadow Heritage Assessment, including at Bere Mill and Itchen Stoke Mill. A key local landscape feature, structures and topography survive at many of these locations, although 19 of the units are classed as 'destroyed'. 13 additional locally designated Parks and Gardens are present including, directly on the Cheriton Stream, Tichborne Park and The National Trust property at Hinton Ampner. The Market Towns of Andover, Whitchurch and Alresford grew up around river crossings & confluences. Industries associated directly with the river systems are important employers locally; as well as angling these include Portals on the Upper Test, and several watercress growers.
NATURAL ENVIRONMENT	<ul style="list-style-type: none"> The Cheriton Stream, & the downstream parts of the River Arle and Candover Brook fall within the River Itchen Special Area of Conservation (SAC) The same sections of river plus much of their surrounding floodplain are part of the River Itchen Site of Special Scientific Interest (SSSI) The Upper Test and parts of its floodplain are designated as part of the River Test SSSI These designations reflect the importance of the chalk stream resource; England's unique contribution to global ecology There are a further 11 SSSIs within the project area including Alresford Pond on the R. Arle and Bere Mill Meadows on the Upper Test. 10 Priority Habitats are represented covering almost 14,000Ha, including Coastal and Floodplain Grazing Marsh, Lowland Meadows, Lowland Fens, and Lowland Mixed Deciduous Woodland. This represents a fifth of the Scheme area. 	<ul style="list-style-type: none"> Anton Lakes is designated as a Local Nature Reserve There are 502 Sites of Importance for Nature Conservation (SINCs) in the project area including woodlands and meadows and wetland habitat, covering around 6% of the project area in total The project area includes 8 Biodiversity Opportunity Areas (BOAs) representing part of the strategic ecological network within Hampshire. Key are the Itchen Valley and Test Valleys BOAs which collectively contain almost all of the river and floodplain areas within the project boundary. Hampshire's only significant population of native white-clawed crayfish are found on the upper Itchen tributaries All 7 tributaries have winterbourne sections which flow only when groundwater levels are high. Some are home to species like the rare 'Winterbourne Mayfly'.
SOCIAL & CULTURAL HERITAGE	<ul style="list-style-type: none"> Two English Heritage sites are present, at Ludgershall Castle & Cross and The Grange at Northington 82 Scheduled Monuments including long and round barrows, hill forts, roman villas and roads, medieval settlements and Alresford Bridge on the R. Arle. 25 Grade I Listed Buildings 83 Grade II* Listed Buildings with many located along the river valleys, including Whitchurch Silk Mill 1662 Grade II Listed Buildings or structures, with the majority located in the older settlements along the river valleys. The Grange and Old Alresford House are among 10 sites listed on the Register of Historic Parks & Gardens (6 of which include or are adjacent to the chalk streams) The site of the Battle of Cheriton 1644, said to be a turning point in the struggle for control between King and Parliament, is a Registered Battlefield. The adjacent river provided drinking water for troops and animals. 	<ul style="list-style-type: none"> 37 Conservation Areas exist within the Winchester, Basingstoke & Deane and Test Valley parts of the Scheme area, which celebrate and protect the vernacular built heritage and historical interest Of these, almost two thirds include parts of the chalk river channels, highlighting how the tributaries are important to the sense of place A further 13 locally-designated historic parks and gardens can be found, again often associated with the river valleys 30 structures are listed in the Hampshire Mills Group's comprehensive audit of 'The Mills and Millers of Hampshire, ranging from complete Mill Buildings to surviving mill races, mill stones and wheel pits The rivers have been the source of much literary inspiration, featuring in classics including Watership Down and The Water Babies. Influential fishing writers hail from the area including Harry Plunkett-Greene, whose love of the Bourne Rivulet is the basis for the Angling classic 'Where the Bright Waters meet'

1.6 How has the significance changed since Stage 1?

Since the submission of our Round 1 application, there have been two key changes in our understanding of the significance of the heritage of the Watercress and Winterbournes area.

1. Public and political interest in chalk rivers

Guided by their regulators, water companies produce plans that set out how they will meet the water supply needs of their customers and the ecological needs of the environment whilst carrying out their duties. This process involves public consultation and in Hampshire has led to significant increased interest in the health of the chalk rivers from which Southern Water abstracts. The pressures on the environment and the level of public interest were so great that the company's plans were scrutinised through a Public Inquiry, and local interest has remained high as the plans (covering 2020-2025) are finalised. Similar interest has been seen across the parts of the country that are home to chalk rivers, and with water levels relatively low and temperatures high throughout summer 2019 there is increasing political interest in the state of chalk rivers too. This creates an opportunity to capture people's interest, and to harness it via involvement in the Landscape Partnership Scheme. At the same time, the collection of baseline data through Watercress and Winterbournes give us a more detailed understanding of the pressures facing the headwater streams in the project area, particularly from sediment, pesticides and pressure on flows, so that we can best direct effort and attention to areas where improvements can be made.

2. The importance of our Water Meadow Heritage

Our Water Meadow Heritage Assessment has revealed much about both the interest and the fragility of the water meadow resource of the headwater streams. The area has been found to be unexpectedly rich in this form of built heritage, with a number of sites not picked up by prior work in 2000 being identified during the research. 73 sites were noted of which 10 were newly described, made possible through advances in methodologies including the availability of LiDAR data. Some of these contained examples of built structures which are unique or among some of the best in the UK, for example at Bere Mill on the Upper Test. However the assessment also highlighted some concerns; of those 73 sites which at one point supported water meadows, 19 of the units were classed as 'destroyed'. Some of this loss is historic, but worryingly, some of those sites had been lost since the 2000 survey. This creates an unexpected urgency to share the importance of these sites with landowners and wider communities, encouraging their protection and preservation, and to work to preserve the most uncommon structures as examples which may otherwise be lost.





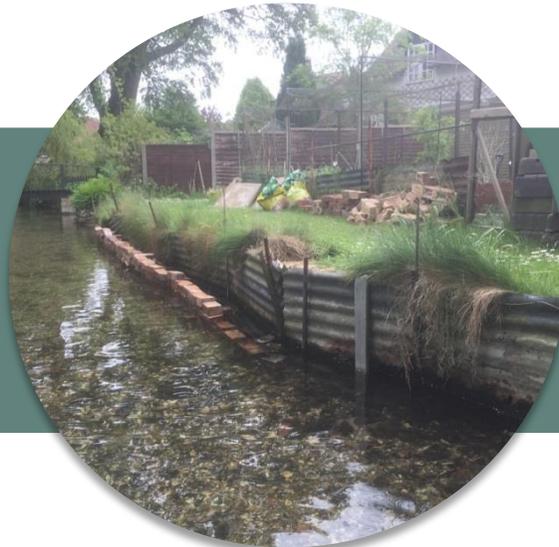
Section 2: Threats to the Watercress and Winterbournes area

2.1 Introduction

In common with many UK landscapes, the Watercress and Winterbournes area is facing a period of uncertainty that may jeopardise its heritage value but could also represent a great opportunity to protect and enhance it in the long term. As the UK prepares to leave the EU new legislation, policy, and an effective watchdog will be required. As the Scheme progresses, the layer of uncertainty presents a risk to its integrity and a degree of flexibility will be required as new policy drivers and funding packages emerge.

Defra's 25 Year Plan indicated a shift towards public money for public goods and services, but models of investment seem a long way off. Given the immense public benefits provided by our chalk streams and rivers, the Watercress and Winterbournes area would seem to be a highly 'investible landscape'; this presents an opportunity for the Landscape Partnership Board to secure resources in the longer term.

In this section we outline the most significant threats to the area, and how we will address them to ensure that the landscape is more resilient in these times of change. It is important that we address all of these issues in tandem: as with most natural environments it is not just one or two main issues that cause the deterioration in their health, but numerous smaller, collective impacts.



2.2 Climate change

The threat of climate change to our chalk streams is both subtly unknowable and potentially dramatic. When rainfall patterns change whole winterbourne sections can remain dry or suddenly become inundated and at risk of pollution from runoff. Equally it only takes a small rise in temperature to cause catastrophic impacts on flagship species such as wild brown trout.

There is a growing public wave of concern on climate issues, and increasing impatience around the failure of public bodies to properly address them. Moreover, tropical rainforests and coral reefs remain the centre of attention while our chalk streams – one of the world's most precious and vulnerable natural assets – are often underappreciated.

This lack of understanding raises further obstacles: many people living near the streams know that flooding could affect them, but do not want to see hard engineering in their areas. Similarly those utilising the streams for their livelihood need to continue operating, but do so in a way that does not jeopardise this fragile landscape.

Watercress and Winterbournes represents a huge opportunity to protect the streams by tapping into the growing community-level interest and effect positive changes in behaviour. Through a range of volunteer activities and strengthening our Community Catchment Groups (as discussed in Section 3) we will build resilience in the local communities. We will equip them with the skills and confidence needed to take the lead in monitoring their chalk streams and making changes which will maintain it in good condition.



Photo credit: Cheriton CCG | David Holt via Wikimedia Commons



2.3 Water quality

The water in our streams is vital as a habitat for wildlife, and also valuable as the main source of drinking water in our region. However, its quality is at risk of deteriorating from a range of pressures, such as excessive levels of nutrients, sediment, low flows, and pollution events.

Riverflies and other freshwater invertebrates are a crucial part of our freshwater ecosystems, and a key link in the food chain. Their specific tolerances to environmental change, limited mobility, presence throughout the year, and relatively long life cycle make them excellent biological indicators for monitoring water quality. Results from the 2018 riverfly census (Salmon & Trout Conservation UK) show that the insect communities in the Rivers Test and Itchen are under considerable pressure from excess fine sediment. The Test below the Pillhill Brook and Upper Anton also shows stress from excess phosphates.

We completed complementary invertebrate and water chemistry sampling during our Development Phase (information found in **Appendix 2**). This allowed us to highlight the catchments that are experiencing stress from sediment, excessive nutrient levels (e.g. phosphate and nitrate), low flows, and complex chemicals (e.g. pesticides). Figure 3 indicates the location and severity of these risks in the Watercress and Winterbournes area, allowing us to plan accordingly and target our delivery works to reduce some of these pressures. The pressures could themselves be as a result of:

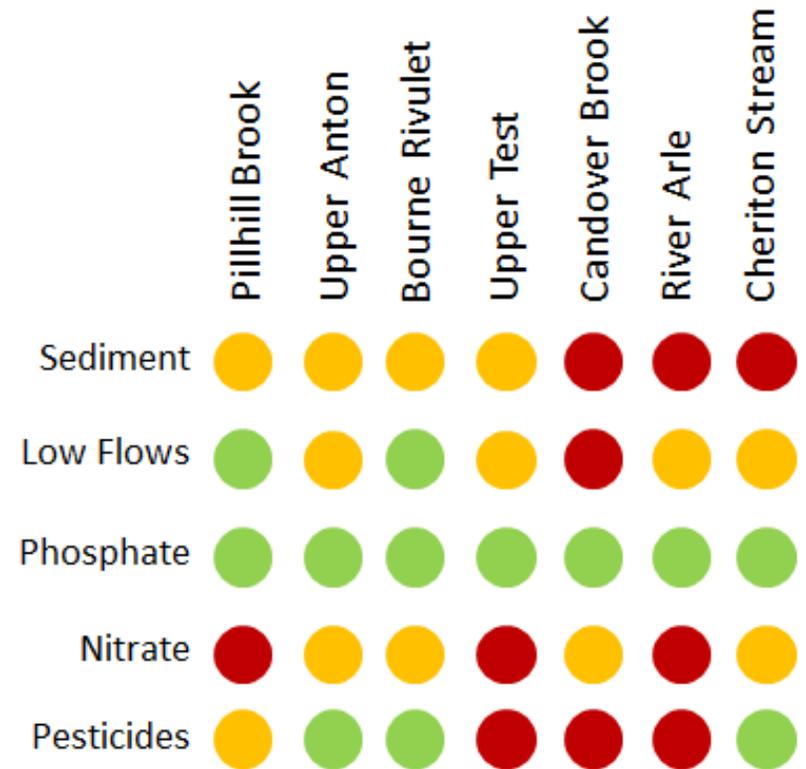


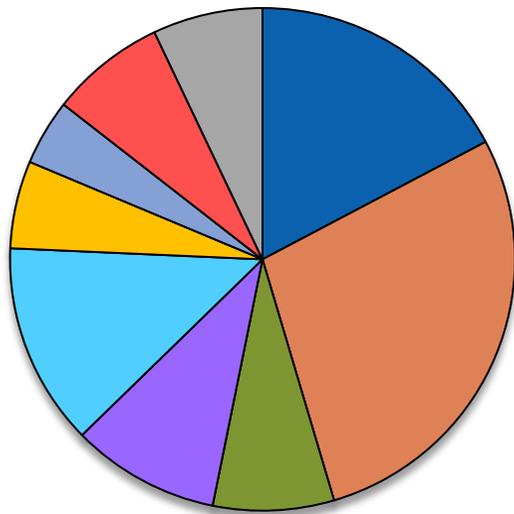
Figure 3 Threats to water quality in the Watercress and Winterbournes area split by catchment



2.4 Habitat degradation and invasive non-native species

The chalk streams and their floodplains are often owned and managed in a piecemeal fashion by people who lack the knowledge, skills or means to maintain or enhance their special qualities. Walkover surveys in our Development Phase uncovered widespread benign neglect and inappropriate management of both the watercourses and wider floodplains across the Watercress and Winterbournes area.

As 'soft' and 'low-energy' features, chalk streams are easy to restore but also easy to abuse. Sensitive habitats are often either under-managed, perhaps being taken over by scrub, or over-managed by being 'tidied-up' or modified in ways which degrade them. Figure 4 shows the spread of problems in the area found during walkover surveys of the seven catchments (full results can be found in **Appendix 3**).



- Fish barrier - fish cannot reach spawning sites or good habitat upstream
- Sedimentation - smothers gravels that are a vital habitat for fish and invertebrates
- Overshading - reduces the light so that marginal and aquatic plants cannot grow
- Cattle poaching - causes bank erosion and increases sediment input into the stream
- Poor flow diversity - increases the amount of sediment being deposited on the channel bed
- Lack of weed - young fish and other species like water voles require sheltered areas of river to feed and rest
- Excessive management - unsympathetic management of riverbanks can increase run-off
- Inappropriate intervention / structure - corrugated iron and telephone pole bank revetments cannot support wildlife
- Lack of cover - trees provide cover for fish and insects and shade the wider, preventing water from overheating

Figure 4 The spread of habitat degradation pressures observed in the Watercress and Winterbournes area



In addition, inadvertent past releases of invasive non-native species (INNS) threaten the ecosystem in new ways – plants such as Himalayan balsam (pictured above) and newer threats like orange balsam out-compete the characteristic stream-side flora. Signal crayfish and American mink (pictured on page 19) pose serious threats to chalk stream fauna by preying upon and displacing species such as Hampshire’s last and highly vulnerable native white-clawed crayfish population, as well as water voles and birds.

Following community consultation and walkover surveys by experts in the Watercress and Winterbournes area we have a good understanding of where these problems occur. These threats create huge opportunities for partner input and community involvement, as with concerted effort INNS can potentially be eradicated, and our Community Catchment Group members are keen to tackle the issue. Improving landowners’ understanding of good stewardship while also undertaking practical conservation work will help reverse the decline caused by the intrusion of these species. In addition, there is scope to bring together the two groups by enabling volunteers to help landowners manage their chalk stream habitats, including problems caused by INNS, through surveillance and practical action.

2.5 Deterioration of built heritage

The built structures in the Watercress and Winterbournes area - from sluices, hatches and weirs within water meadow systems to mills and watercress beds from local industries - are central to understanding its cultural history. These structures are widely dispersed, and while some remain used and in good condition many exist only as remnants – one example is at Itchen Stoke Mill on the Candover Brook, which is peppered by the deteriorating relics of a significant water meadow system.

These remnants are nonetheless crucial for showing how human activities have shaped and been shaped by the landscape over time. Just as the streams weave through the area, so do the various buildings and structures put in place to utilise their special qualities. During the Development Phase we greatly increased our understanding around the distinctiveness of and threats to this built heritage, in particular the numerous water meadows. A survey has found that some of the water meadows in the area are nationally unique and especially threatened by neglect.

Of around 80 previously recorded historic water meadow units, we know now that 19 have been destroyed since the Hampshire Water Meadow Survey in 2000 and many others are in a poor state of repair. However we have also recorded 10 new sites and significantly improved our knowledge of places like Bere Mill on the Upper Test, which is an important example of rectilinear and sinuous water meadows in three different blocks. The hatches on this site (used to control the flow of water) are brick with cast iron bars and narrow boards – a type rarely found in other water meadows.



2.6 Physical access to our chalk streams

Physical public access to the chalk streams is patchy, and can be considered a threat because it represents a barrier to experiencing, understanding and appreciating both built and natural heritage. Conversely, too much footfall in the wrong place can threaten the sensitive nature of the chalk streams and the economic interests they represent.

Members of the communities consistently report that limited physical access to the chalk streams is a disappointment to the community. This is echoed in Parish Plans but limited progress has been made due to landowner disinterest, ecological constraints, or prohibitive costs. Consultation in our Development Phase has highlighted a need to enhance this physical access, where the landowners are willing.

There are significant opportunities to open up appropriate and sensitive physical access through Watercress and Winterbournes. We have identified opportunities through volunteer-led access audits to improve existing access, making our streams more accessible to a wider range of people by replacing stiles with kissing gates, repairing bridges and making path improvements. There is also potential to use an approach similar to the National Garden to provide intermittent access to stretches of the streams that run through private land.



2.7 Intellectual access to our chalk streams

Intellectual access to the headwaters in the Watercress and Winterbournes area is represented by such diverse areas as literature, local knowledge, cultural pursuits, and specialist expertise. Local food and drink also create a means to engage with the chalk streams, with watercress, gin, and of course drinking water providing a tangible way for hundreds of thousands of people to access the treasures the landscape has to offer.

Without it being unlocked there is a real risk that much of this intellectual access will be unknown to future generations, and that this unique heritage will lose its perceived value. We know from our Development Phase that many local people have limited knowledge of their chalk streams and its associated heritage but a huge number are interested to know more. Re-telling stories and translating messages from literature and other cultural sources will help us address the threat of diminishing appreciation.

We will highlight some of the rich sources of cultural heritage from the area including:





2.8 Lack of traditional land management skills

In common with many rural areas, our landscape has experienced a gradual distancing of the local communities from the landscape in which they live as land use has shifted. Mixed farming has changed to a predominantly arable landscape, and there has been an increase in the number of landholdings dedicated to non-farming activity. There has also been significant fragmentation of landholdings in the area, especially in the vicinity of watercourses that present fishing interest.

This fragmentation, mechanisation and agricultural intensification are compounded by a lack of economic motivation for traditional land management. This has resulted in many landholdings which are either over-managed (drained, fertilised, mechanically cut, turned over to equestrian pasture) or undermanaged (invaded by rank vegetation and scrub).

These circumstances have also created a lack of the traditional land manage skills which have been fundamental to managing the landscape for centuries; this in turn threatens the landscape's heritage. These include:

- Lack of water meadow and water level management skills
- Lack of knowledge about the wildlife that live in the chalk streams and the specific habitats they rely on
- Loss of riparian habitat and weed management skills
- Loss of skills and motivation for maintaining small-scale built heritage

There is, however, a great opportunity to address this threat though up-skilling people once again. Our Community Catchment Groups have identified this as one of the areas in which the Scheme can make the most impact, and our liaison with landowners during the Development Phase has identified that many are keen and willing to learn.



2.9 Building joined-up management between stakeholders

The network of agencies and people who oversee many of the activities that affect our landscape can be confusing and lacking in continuity. Often staff who administer certain consenting processes and funding schemes are different to those who administer and regulate activities on the ground. As well as acting in a statutory capacity, very often these bodies also promote voluntary measures to protect and enhance the environment. Stakeholders can easily become confused and end up not progressing work which, given guidance, should be easily achievable.

In addition we are set to enter a time of change in how the government funds farmers and landowners to manage the environment for the public good. As the UK prepares to leave the EU, which represents a major source of grant funding for farmers, many landowners are hesitant to commit to schemes which may subsequently limit their farm business options. Until there is more certainty there is a real risk of inertia and continuing declines to the natural heritage of the Watercress and Winterbournes area.

In the long term these issues can be significant barriers to progress, but there is often a will to overcome them. Watercress and Winterbournes offers an excellent platform for promoting a joined-up approach between stakeholders; not only will it act as a hub for delivering its vision, it will build relationships and connections between stakeholders of all types in the longer term.

2.10 Community involvement in decision-making and action

Lastly, but perhaps most significantly, communities in the Watercress and Winterbournes area have identified a lack of involvement in key decisions and activities as a barrier to the future management of their chalk streams. Communities or landowners will sometimes be approached by influential organisations with fully worked-up projects, giving them little opportunity to participate in the development process.

In addition, although parish councils, town councils, and community groups are enthusiastic to initiate local projects they often struggle to progress their plans due to some of the barriers outlined in Section 2.9, as well as a lack of guidance and resources. Many local people also lack the confidence to get involved, as they feel limited by not knowing who to approach or which projects would be suitable for their local area.

“There’s a huge bunch of highly skilled and knowledgeable people in Alresford waiting to get involved. It simply needs agreement of an objective and then being broken down into manageable projects and targets, with roles clearly defined.” – David, River Arle

By giving communities a voice in the Landscape Partnership Board and our Community Catchment Groups, Watercress and Winterbournes will help to overcome this lack of community involvement by giving local people a central role in project development and delivery.

On the following pages (Figures 5 and 6), we have two catchment examples of the threats to the Watercress and Winterbournes area, the impacts these threats have, and where they sit on their respective streams.



On-line lakes have poor water quality in themselves and have a deleterious effect on water quality downstream



They can also be a barrier to fish passage and can harbour and help spread invasive species



Toxic pollutants including pesticides and heavy metals from highways sources often bind to fine sediment



Sediment run-off from roads

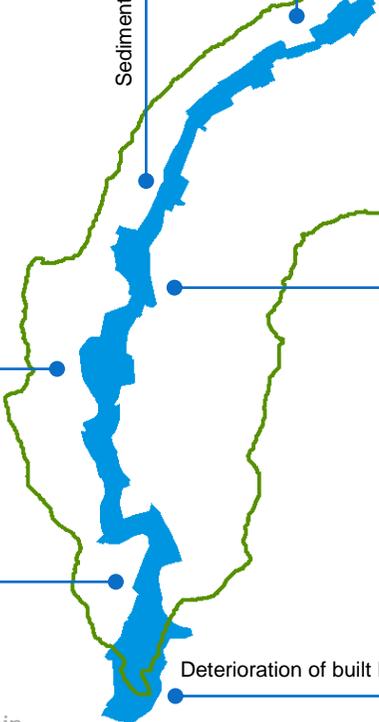
Sediment run-off from roads

In the face of climate change, trees provide vital shade to keep rivers cool



Lack of shade

On-line lakes



Cattle and livestock poaching



Poaching causes river banks to erode, widens the channel and increases sediment input into the stream



By losing our built heritage we lose the stories and history of our landscape

Deterioration of built heritage

Figure 5 Threats on the Candover Brook

Photo credit: WCSRT | Kathy Stearne | Adam Cave | HIWWT

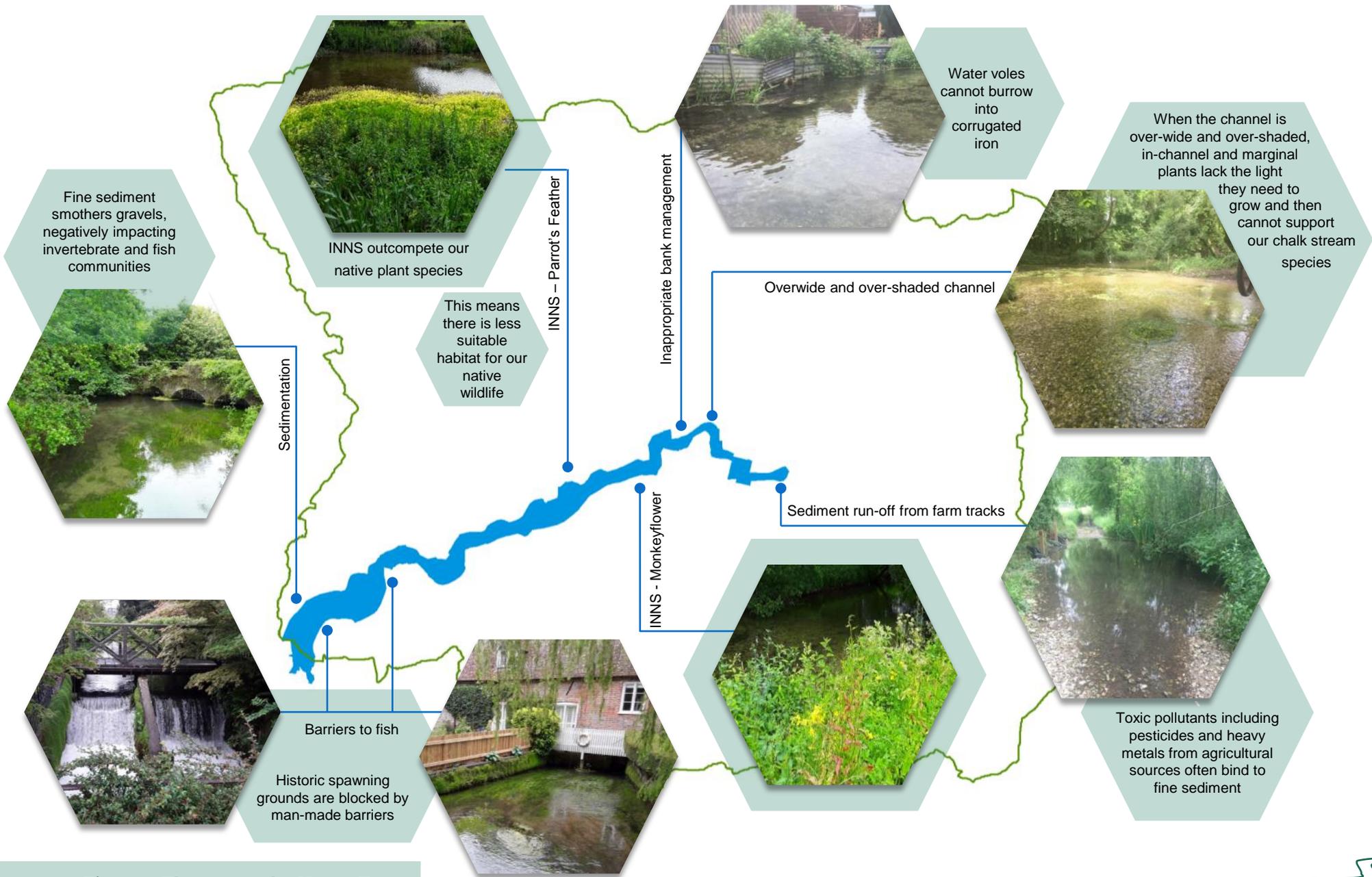


Figure 6 Threats on the Upper Test

2.11 Opportunities within Watercress and Winterbournes: how we will address the threats...

2.11.1 Building a partnership

All over the Test and Itchen catchment, there is a range of both voluntary and public sector organisations involved in the management of the chalk streams and their heritage; all have different areas of expertise and interest, different management views, and different responsibilities. Through the Catchment Partnership a number of these groups have been working together on specific projects targeting different areas, often ones further downstream. Groups often stick to trends of working with particular partners rather than branching out for a more holistic approach, meaning that the Catchment Partnership's work to date has only involved a few key organisations.

Watercress and Winterbournes represents an opportunity to expand the Catchment Partnership, bringing in groups that have not previously been involved and delivering targeted actions for the seven chalk streams on a landscape-wide scale. This will create a better working relationship between the various organisations operating in the area, and foster a more collaborative approach to delivering projects regardless of whether they are capital or community-focused.

2.11.2 Working with nature

The main opportunity for Watercress and Winterbournes is to improve the chalk stream and its surrounding floodplain on a landscape-wide scale for both wildlife and people. It will reduce habitat deterioration and removing barriers, thereby allowing species to reach previously inaccessible habitats. This will create a landscape which is more robust and resilient, and more able to withstand major challenges such as climate change and drinking water abstraction.

2.11.3 Working with land managers

Working closely with land managers is vital for increasing understanding of the chalk stream environments and their special characteristics. This is particularly important in areas that are directly adjacent to the chalk streams or have specific heritage value, in which land managers may not know how to manage their land appropriately. Through Watercress and Winterbournes there is potential to:

- Provide farm and land management advice that can help facilitate traditional management of the land for both wildlife and heritage
- Give land managers the knowledge and skills required to manage their land for wildlife and heritage
- Encourage land managers to sign up the Grants Scheme in order to deliver 'chalk stream-friendly' land improvement works
- Encourage land managers to work with the Scheme in order to deliver habitat improvements on their land that benefit their chalk stream and its surrounding habitats

2.11.4 Working with volunteers

There are a number of existing conservation volunteer groups in the Watercress and Winterbournes area who want to get more involved in surveying and developing their skills. Over Development Phase activities uncovered a clear demand for more opportunities to volunteer and be involved in celebrating and protecting the chalk stream environments. This could be through direct habitat restoration works, monitoring, specialist surveys, learning or restoring built heritage, or helping at events. By building sustainable Community Catchment Groups for each chalk stream, we will help local communities to develop their own projects that sit within the Scheme and are supported by the partners.

Many of the people in the Community Catchment Groups are retired, with available time and enthusiasm that can be captured through volunteering opportunities within the Scheme. There are also many landowners and fishermen who are keen to get involved in their spare time. Due to the community-led approach of Watercress and Winterbournes, and the existing volunteer base across the Scheme area, there is an immense opportunity to create a larger and more highly skilled army of volunteers.

We recognise the valuable contribution that our communities are making to the Scheme, and have devised our 'Chalk Stream Champions' project to give them a formal platform through which they can receive training and support. We hope that by creating this Chalk Stream Champion network the participating volunteers will have access to shared insights, new connections, and a sense of pride in their volunteering work.

2.11.5 Working with communities and people

Raising awareness and increasing understanding of the chalk stream environment also requires a close working relationship with the local communities. Increasing their appreciation of the chalk streams, their special qualities, and their unique heritage will enable them to enjoy their local areas more fully and motivate them to take action in caring for nature. During our Development Phase, local people were asked how they would like to learn about the landscape and its heritage. This identified the following opportunities:

- Build sustainable Community Catchment Groups that provide a hub for volunteer involvement
- Encourage community groups to seek additional funding through grant schemes in order to deliver projects of their choosing
- Encourage landowners, partner organisations, and farmers to allow greater public access on their land through projects and guided walks
- Raise awareness of the heritage surrounding chalk stream environments in order to inspire community members
- Use a variety of communication portals to educate the community and share the importance of their local landscape
- Provide new engaging ways for people to experience the landscape and its unique heritage
- Promote the recording of local stories through oral history and creative projects, as well as the organisation of heritage-themed events
- Work with schools to create a programme that increases the presence of local landscape heritage in the national curriculum
- Show people the heritage on their doorstep and allow them to take pride in their local area
- Reach a greater diversity of audiences through targeted events and information that address their specific needs
- Undertake outreach work to engage with groups that are ordinarily difficult to reach and connect them with their local landscape
- Promote opportunities for volunteering, events, training and workshops for the community to enjoy the unique characteristics of their environment

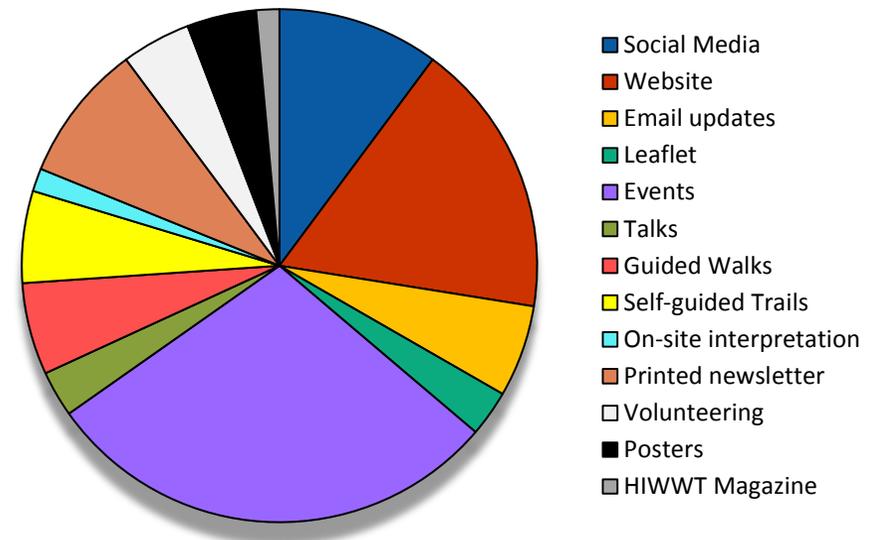


Figure 7 Ways in which people would like to find out about chalk stream heritage

2.11.6 Links between the threats and how they could be addressed through Watercress and Winterbournes

Landscape threat or vulnerability	Ways in which W&W could address	How W&W could address	Projects (more information in Section 5)
Water quantity (including climate change, temperature, flooding, droughts)	<ul style="list-style-type: none"> • River restoration works in the seven catchments • Tree planting in areas to help mitigate climate change • Installing natural flood management in priority areas • Raising awareness and promoting community water efficiency • Behaviour change campaigns 	<ul style="list-style-type: none"> • Building a partnership • Working with nature • Working with land managers • Working with volunteers • Working with communities and people • Education 	1.1 Chalk Stream Habitat Restoration 1.2 Natural Flood Management 1.3 Stopping Sediments 1.6 Vitacress Wetland Creation Scheme 2.2 Grant Schemes 2.4 Septic Smart 2.5 Tackling Invasives
Water quality (including sewage pollution, agricultural pollution, sedimentation)	<ul style="list-style-type: none"> • River and habitat restoration works in the seven catchments • Raise awareness of the issues • Monitoring • Educating communities and landowners in priority areas • Behaviour change campaigns 	<ul style="list-style-type: none"> • Building a partnership • Working with nature • Working with land managers • Working with volunteers • Working with communities and people • Education 	1.1 Chalk Stream Habitat Restoration 1.2 Natural Flood Management 2.3 Save every drop
Habitat Degradation (from historic modification, sedimentation, invasive non-native species, agriculture, development, poor septic tank management)	<ul style="list-style-type: none"> • Habitat and river restoration work across the seven catchments • Educating and providing management plans to landowners and land managers • Raising awareness of the issues with landowners and local communities • Behaviour change campaigns 	<ul style="list-style-type: none"> • Building a partnership • Working with nature • Working with land managers • Working with volunteers • Working with communities and people • Education 	1.1 Chalk Stream Habitat Restoration 1.2 Natural Flood Management 1.3 Stopping Sediments 1.4 Spawning Habitats 1.5 Conserving our Native Crayfish 1.6 Vitacress Wetland Creation Scheme 2.4 Septic Smart 2.5 Tackling Invasives

Landscape threat or vulnerability	Ways in which W&W could address	How W&W could address	Projects (more information in Section 5)
Invasive non-native species (outcompeting native plants and animals)	<ul style="list-style-type: none"> • Ongoing monitoring to identify locations of invasive species across the catchments • Volunteer-led and contractor-led removal of known invasive species • Raise awareness of the issues • Work with garden centres 	<ul style="list-style-type: none"> • Building a partnership • Working with volunteers • Working with land managers • Working with nature • Education 	2.5 Tackling Invasives 4.2 Chalk Stream Champions
Deterioration of built heritage	<ul style="list-style-type: none"> • Contractor-led and volunteer-led restoration of built heritage structures • Education and training to improve skills • Raising awareness and celebrating the built heritage in the area • Interpretation of heritage 	<ul style="list-style-type: none"> • Working with land managers • Working with volunteers • Education 	3.3 Restoring our Chalk Stream Structures 4.2 Chalk Stream Champions
Physical access to the streams	<ul style="list-style-type: none"> • Improving path networks e.g. by installing kissing gates to replace stiles or improving bridges • Encouraging local people to open their gardens • Encouraging landowners to provide permissive pathways 	<ul style="list-style-type: none"> • Building a partnership • Working with land managers • Working with volunteers • Working with communities and people 	3.2 Roaming by the River 3.6 Open Chalk Streams
Lack of understanding and access to knowledge (people unaware of the heritage of their areas and not knowing what is available or how to access it)	<ul style="list-style-type: none"> • Working in partnership • Behaviour change campaigns • Raising awareness • Interpretation • Educating communities • Creating a signposting gateway with information and the person to contact • Skills development and training to provide access to better knowledge • Working with next generation of school children and youth groups to create a long-term legacy 	<ul style="list-style-type: none"> • Building a partnership • Working with land managers • Working with communities and people • Working with volunteers • Working with nature • Education 	2.1 Building Sustainable CCGs 2.3 Save every drop 2.4 Septic Smart 2.5 Tackling Invasives 3.1 Watercress and Winterbournes Education Programme 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 4.1 Chalk Stream Events 4.2 Chalk Stream Champions

Landscape threat or vulnerability	Ways in which W&W could address	How W&W could address	Projects (more information in Section 5)
Decrease in traditional land management skills (including land management skills, river management, building skills as a result of changing practices)	<ul style="list-style-type: none"> • Training land managers, contractors, river managers, community groups • Developing new skills and up-skilling • Raise awareness and educate people on the traditional skills 	<ul style="list-style-type: none"> • Working with land managers • Working with volunteers • Working with communities and people 	2.2 Grant Schemes 3.3 Restoring our Chalk Stream Structures 4.1 Chalk Stream Events 4.3 Chalk Stream-Friendly Land Management
Lack of community involvement in decision-making and action	<ul style="list-style-type: none"> • Building resilient CCG groups to provide an active role in decision-making and action in their area • Educating land managers • Enabling the community to progress their projects with support from the partnership • Working in partnership • Providing the community with signposting to support and links with wider partners 	<ul style="list-style-type: none"> • Building a partnership • Working with volunteers • Working with land managers 	2.1 Building Sustainable CCGs 2.2 Grant Schemes 4.3 Chalk Stream-Friendly Land Management



Section 3: Our audiences



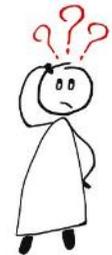
3.1 Our approach

The Watercress and Winterbournes areas covers a large section of north Hampshire and a small part of west Wiltshire (Figure 8, over page). At 687 km² it is home to approximately 104,000 people distributed almost equally between more urban market towns and smaller rural settlements. The market town of Andover on the banks of the River Anton is the single major urban centre in the area with 46,000 residents, and there are also the smaller market towns of Alresford and Whitchurch. The rest of the area's residents live across almost 100 hamlets and villages, ranging in size from a just couple of hundred residents to several thousand. The vast majority of these rural settlements sit within the floodplains of the seven chalk streams that feed the Rivers Test and Itchen.

What this means is that almost 90% of the area's population is concentrated in just 170km² (25%) of its landscape area, with the remaining 10% spread thinly across the 510 km² (75%) wider catchment.

For our audience development work we wanted to learn more about the people who have a stake in Watercress and Winterbournes in order to understand:

- Who lives in the landscape?
- Who visits the area?
- How people use the landscape?
- What they feel about it?
- What barriers they experience?
- What makes Andover different?



Because of the mix of rural, urban and floodplain communities, we used the following three geographic sub-areas to undertake a desk study that considers the respective characteristics, needs, and aspirations of each. The geographic area breaks down into rural floodplain, rural wider catchment and urban floodplain.

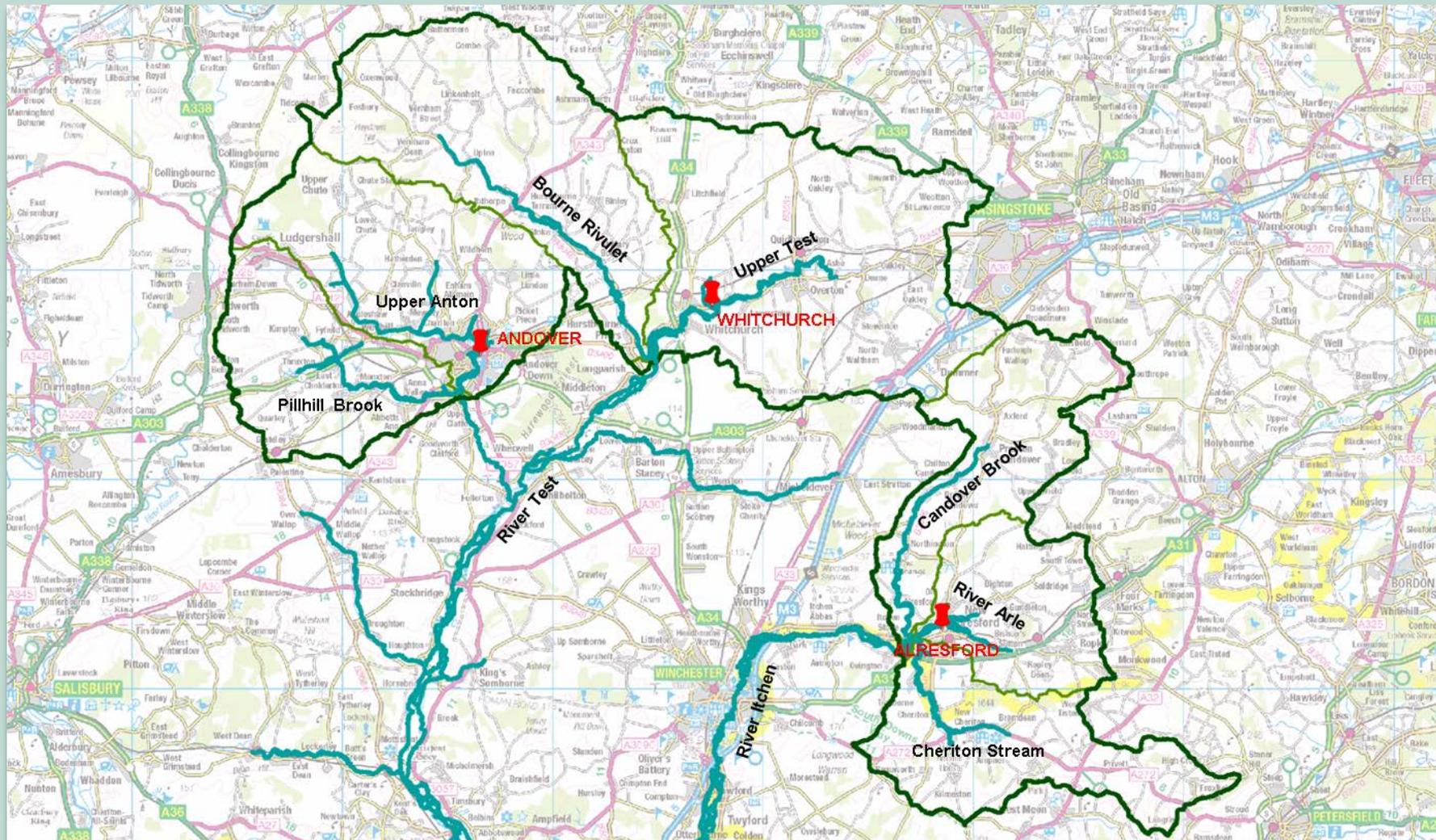


Figure 8 Map indicating the area boundary and towns in the Watercress and Winterbournes area

3.2 Demographic and socio-economic profiles

This section starts by presenting and comparing demographic and socio-economic data for each sub-area. It goes on to set out what we learnt from this data and analogous research. We will also share the further, more focused research and community consultation we undertook, which helped us identify less visible audience groups. We will then discuss the work we have undertaken to reach these communities, to secure their participation in the development and delivery of the Scheme.

3.2.1 Rural floodplain

Looking at the rural floodplain we found that it has a relatively high population density for a rural area with 70+ hamlets and villages. It has a fast-growing population with forecast growth at almost twice the county level (Table 1). The high level of development going on in the area is a major issue: the rural floodplain contains affluent areas but these communities lack facilities such as shops or doctor's surgeries. This affluence also masks deprivation indicators such as social isolation, which is compounded by a lack of transport and barriers to housing caused by high house prices.

There is, however, evidence that community cohesion can develop in the rural floodplain. We have met with members of existing interest groups during our community engagement, and these individuals have joined Watercress and Winterbournes. This has resulted in them securing and cementing new friendships and working relationships across wide catchments.

	2016 Population	2016 density per km ²	Forecast population 2026	Forecast % increase 2016 - 2026
Urban floodplain (Andover)	46,000	1,410	53,000	15.0
Rural floodplain	44,000	529	48,000	8.0
Rural wider catchment	14,000	27	15,000	7.0
Total W&W landscape	104,000	166	116,000	11.5
Hampshire (excl. Unitaries)	1,365,000	372	1,431,000	4.8
England	55,000,000	415	58,500,000	5.9



Table 1 Comparison of select demographic data between sub-areas and within county and national averages

Source: The Office of National Statistics (ONS), 2019

3.2.2 Rural wider catchment

This landscape is very sparsely populated (as shown previously in Table 1). Although it contains some of the least deprived parishes in the country, it contains rural communities without facilities and people who suffer high levels of isolation due to a lack of transport.

What we have learned is that many of those at risk are older members of the community but not exclusively so, with some young families in remote rural areas also being severely disadvantaged by a lack of access to affordable transport. Our Community Catchment Group members will help us to identify individuals within the dispersed rural communities who are experiencing, or are vulnerable to, these issues.

The high property prices mean that there are very real barriers to housing for local people. In some places there is strong community cohesion - for example, in Preston Candover the local community successfully fundraised and built a new community shop supported by an army of voluntary staff.



Photo credit: Maggie Shelton



3.2.3 Urban floodplain (Andover)

Andover feels very different to the rest of the geographic catchment. It is a large, busy market town that has good infrastructure, with many shops and offices. Our desk study found that it is rapidly expanding with a forecast of population growth three times the county and national rate; this is putting significant pressure on services and facilities. Andover has a bespoke 20-year strategic development strategy – Andover Vision – which is led by the local authority and partners across the business, education, and voluntary sectors.

In general, Andover has a much younger population than the rest of the Watercress and Winterbournes area. It has relatively low ethnic diversity but is home to significant Nepalese and Polish communities. Andover suffers from higher levels of social and economic deprivation than the rest of the Watercress and Winterbournes area (Table 2) and the parish of Knights Enham ranks amongst the 20% most deprived parishes in the country. Residents in Andover have good access to housing, and public and transport services, compared to the rest of the Watercress and Winterbournes area. People in Andover are engaged and interested in getting involved - for example, there is an active voluntary group called The Anton River Conservation Association (TARCA) who carry out many practical conservation activities. Andover is proud of its military presence and is the base for Army Headquarters.

Area	Number of Parishes	CoE parish IMD rank	Barriers to housing	Levels of educational attainment	Levels of illness & disability	Receiving income support	Access to services
Urban floodplain (Andover)	3	7,050	9,276	3,019	6,222	4,906	11,988
Rural floodplain	38	9,354	4,526	9,800	10,723	10,438	6,912
Rural wider catchment	16	10,073	4,081	10,127	11,131	11,351	6,441
Whole W&W area	57	8,825	5,961	7,648	9,358	8,898	8,447

Table 2 Comparison of socio-economic data between sub-areas. (Source: Church of England - Parish level Indices of Multiple Deprivation, 2019)

Young families and young people

Andover YMCA is an important provider of early years, children's and youth activities in the town. It offers a range of free access to family support services. Augusta Park Community Centre serves a similar role, with a strong emphasis on activities for young families, young people and support for people in crisis. CCG members introduced their services to project staff and provided opportunities to get to know their user groups and understand the perceptions of their local watercourses.

Through discussions and pop-up events, we discovered that young families and young people were:

- Keen to physically explore their local streams and lakes but lacked the confidence or know-how to do this
- Keen to see and learn more about the wildlife of these habitats, but again felt they lacked the knowledge to do this
- Aware of pollution of their local watercourse - litter, algal bloom - but felt unsure about what actions they could take to help improve things.

Projects including *Hidden Treasure Trails*, *Open Chalk Streams* and *Duck Feeding in Andover* have been developed with the CCGs in order to engage this audience (we will share more information about these projects in later sections).

Nepalese and Polish communities

It is estimated that about 2,000 Nepalese people live in and around Andover. Most are either retired or serving Gurkhas, accompanied by their families. We met a representative from the Andover Nepalese Community (ANC) through Test Valley Borough Council (TVBC) and Unity Volunteering (the local provider of community transport).

From our ongoing conversations with the ANC representatives, we have learnt that community members have a strong affinity with their natural environment and welcome opportunities to get more involved in practical activities that contribute to its conservation. We also learned that key to securing the participation of this community is the need for clarity of the task, time, date, place, provision of tools, purpose, supervision, etc.

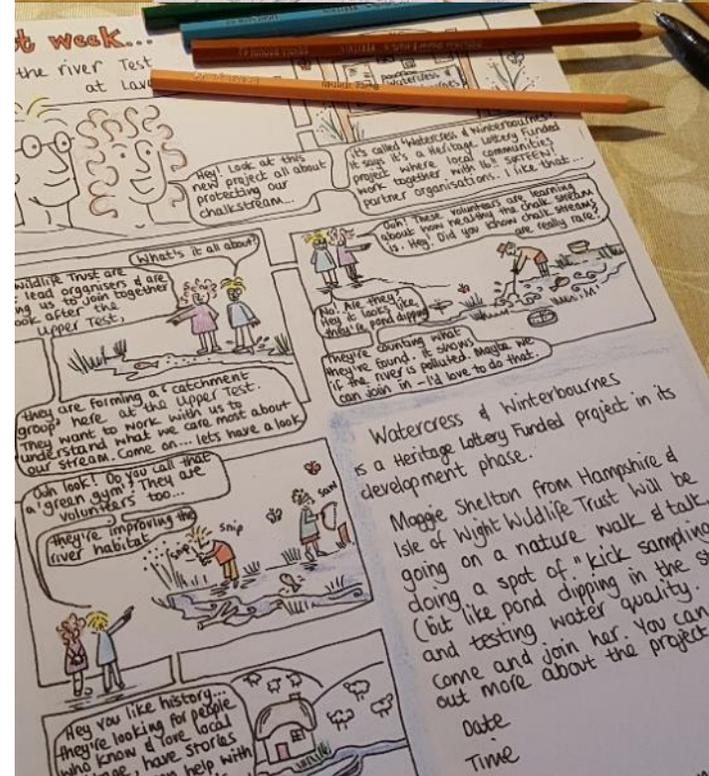


Photo credit: Maggie Shelton

Projects such as **Tackling Invasives** and **Chalk Stream Champions** will be promoted to Nepalese residents and, where possible, will be used as a stepping-stone to their wider involvement.

TVBC has also enabled us to establish links with the local Polish community, another sizeable minority group in the town. Again, through discussions, we found that an enthusiasm to explore and get involved in improving the condition of local chalk streams was tempered by a lack of awareness of how to go about this.

We will therefore continue working with community representatives to ensure opportunities to participate in projects such as **Hidden Treasure Trails**, **Open Chalk Streams** and **Chalk Stream Champions** and are promoted and delivered using Polish speakers where necessary.

Military Families

Andover is home to a sizeable population of service and ex-service families. By talking to CCG members, and Andover Vision stakeholders, we developed links to health service providers and the Army Families Foundation (AFF), which has its HQ in the town. We learned that there are individuals suffering from post-traumatic stress disorder (PTSD) and depression in the area. The therapeutic value of working in nature is increasingly understood and we will therefore work with the Army Welfare Service (and Valley Leisure Veterans) and through the AFF to deliver opportunities to people to participate in tailored activities.

For example, we will provide access to activities that keep triggers such as noise sensitivity to a minimum for sufferers of PTSD, such as **Tackling Invasives**.

Physically and socially isolated people

During our pop-up consultation events, several people with mobility issues came to talk to us about the problems they experience when trying to visit their local stream. This is due to a lack of information or knowledge about which areas are generally accessible, or because the paths are unsuitable.

Working through our CCG networks and with Unity we will be tailoring specific activities within projects including **Tales from the Riverbank**, **Hidden Treasure Trails** and **Open Chalk Streams**, to ensure these people and others experiencing similar issues have the opportunity to participate in the Scheme.



3.3 Building Community Catchment Groups (CCGs)

During the Watercress and Winterbournes research phase, we started talking to local people about the fledgling Scheme to discover potential project ideas and understand people's concerns and motivations for getting involved. Among others, we talked to Parish Councillors, local people and special interest groups. We valued these relationships and the wider reach that these individuals had within their communities.

For the Development Phase of Watercress and Winterbournes to have a truly bottom-up approach it was essential for local people to be a part of the decision-making process. We wanted to build on existing contacts and groups to develop Community Catchment Groups (CCGs) for each catchment, i.e. one along each stream. We would work with these seven CCGs to develop initial ideas, identify some to take forward and develop these into workable projects for the Scheme.

To start the process of building each CCG we began with our existing contacts from the research phase. These contacts gave us access to a wider audience within their communities. We engaged with communities through formal work meetings, informal gatherings and a host of other opportunities. These allowed us to present news about the project and information about how people could become involved, if they were interested.

This community involvement was crucial to the success of the Scheme and, going forward, will help ensure its long-term legacy.



Photo credit: Maggie Shelton

3.4 Reaching out to communities

We wanted to share our knowledge about the streams and the Scheme, and get to know more people in each catchment to be able to work together. It takes time to get to know local communities and the individuals that make them, to earn people's trust and understand what is important to them. It was essential to understand people's interests and motivations for becoming involved. From the beginning, it was evident that success would depend on forming a few strong relationships with key people in each community. During the Development Phase we devoted time to visit local people, community interest groups, landowners, and local businesses in the following ways (Figure 9):



Figure 9 Ways in which we reached out to communities during the Development Phase

We ran a programme of workshops along each stream, in order to meet and work with interested community members, to share stories and identify local projects. These workshops helped to form the CCGs and foster a sense of belonging to the Scheme. We also held a series of meetings in village halls and local pubs to share the Scheme and identify projects using the following strategy:



We also found out about local community news networks and social media avenues so that we could better reach our wider local audiences. In Andover we also built relationships with people working in different organisations that have a deeper reach into their community, such as Test Valley Borough Council (TVBC), the YMCA, Disability Forums, Andover Vision stakeholders and Andover City Council.

People from these organisations helped us to understand their groups in more detail. Groups included young adults and families on new estates, people in care, local communities with different ethnicity, people who are looking for ways to volunteer, people with mobility issues, army personnel in receipt of welfare support or advice, those individuals on drug or alcohol rehabilitation programmes.

Who lives here?														
D	T	C	O	M	M	U	T	E	R	S	R	E	C	RETIREES
L	H	S	A	C	R	H	S	N	E	C	R	S	R	LANDOWNERS
A	E	E	R	E	R	E	T	E	T	N	L	T	E	BEEKEEPERS
N	M	E	E	E	R	C	E	E	I	I	S	U	S	CHILDREN
D	I	S	F	M	N	U	O	T	R	R	F	O	S	GARDENERS
O	L	R	E	A	E	E	C	S	E	S	S	C	G	SCOUTS
W	I	O	R	C	R	N	D	P	E	E	R	S	R	THE MILITARY
N	T	T	R	A	U	M	E	R	S	S	E	F	O	ANGLERS
E	A	I	O	E	E	E	E	E	A	S	L	N	W	NEETS
R	R	S	F	H	K	L	E	R	M	G	G	T	E	CRESS GROWERS
S	Y	I	S	E	E	T	S	L	S	F	N	I	R	VISITORS
N	S	V	E	E	T	E	A	T	A	D	A	S	S	FARMERS
D	T	B	E	C	H	I	L	D	R	E	N	O	R	COMMUTERS
I	R	R	R	S	A	D	B	R	S	W	E	O	O	

Building community groups of Watercress & Winterbournes



Sharing stories and creating enthusiasm

By taking part in events, people became more aware of the heritage or wildlife of their stream.

For example, a landowner who thought that there were no fish in their stream was amazed at the amount of bullheads and young fish we caught during a community stream dip.

Another landowner, who did not know why bricks were in their field, became interested in learning about water meadow heritage and structures.

To understand people's feelings, how they engaged with their stream or regarded it, we carried out an online survey (results in **Appendix 4**). This shows that local residents appreciate their streams generally in terms of the heritage and character, aesthetics and tranquillity, contribution to sense of place, and as a place to relax and enjoy wildlife.

There are many well-established and active volunteer-led heritage, wildlife and conservation groups throughout the area, including Friends of the Arle, Bourne Valley Flood Group, Cheriton Conservation Society and The Anton River Conservation Association (TARCA). These groups have been critical partners in shaping Watercress and Winterbournes. With excellent local knowledge and motivated members, they have helped to form the nucleus of the seven CCGs which will be instrumental in Scheme delivery, as expanded on later in this chapter.

These groups also offered useful introductions into their wider communities reaching people beyond the traditional conservation audiences.

3.5 Community profiles



Pillhill Brook

Good community cohesion. Keen to get young families involved. Keen to engage the school

"We would like to survey the otter population"

"It's nice to see children joining in!"

12 core CCG members

Good wildlife skills

Strengths: species surveying; practical skills

"We used to have curlew and lapwing here in the 1980's!"

Access: not so great.

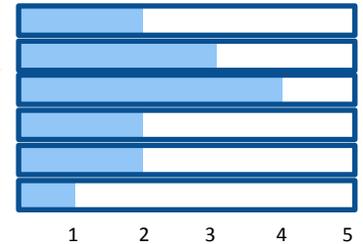
Wildlife: Water vole Amphibians Little egret Brown trout

Chalk stream knowledge is good.

Need: Advice and support

Our training needs: Wider chalk stream issues

Knowledge of rivers & heritage issues
Skills to deliver river projects
Connected to other stakeholders
Ability to organise
Potential to run themselves
Confidence to act



Along the Brook are many riparian landowners with landholdings or gardens of different sizes. Some are aware of what a good chalk stream habitat looks like, but there are many differing views about riparian management. The CCG prioritised a need for awareness raising and advice sharing. Taking an active role in this will help to build confidence within the group.

Heritage features can be seen in fields along the Pillhill Brook although most locals do not know what they are. The CCG feels that understanding and celebrating local heritage is important. There are wonderful stories to be told. One local remembers her father working the water meadows, digging ditches and operating sluice gates and several people said they would like to capture local oral stories.

Generally, the group feels that local wildlife is in decline and they want to do something to help. For example, local landowners were really anxious to find suitable ponds to be used as native white-clawed crayfish arc sites. During the nature walk, people were amazed at the wildlife found in the shallows of the brook. Some monitoring and surveying activities would help this group really get to know their stream and to understand the state of the nature.

Upper Anton

Younger CCG age-profile. Good access to wider community. Good relationship with Test Valley Borough Council and all working together on Andover Vision.



"Let's develop a foraging for watercress event - a bit like foraging for blackberries"



"I've seen kingfishers from the footpath by Anton Lakes. They're beautiful!"



"At the end of a school day, families with children still in their uniforms can be found walking or scootering along the paths, searching for kingfishers."

The Upper Anton CCG is passionate about engaging young families. They would like to come up with creative and original ways of working together through Watercress and Winterbournes. The different cultural groups within Andover sometimes have differing attitudes to natural spaces.

Working with the CCG, this Scheme will seek to foster greater understanding through the cross-cultural sharing of experiences. For example, representatives for the Nepalese community explained that eating outside is an important activity. We will run practical conservation tasks, followed by the sharing of food that has been cooked outside whilst we share stories, to better understand each other.

Another example is to break down the cultural differences around attitudes to fishing (for example differing attitudes to eating carp within the Polish and white British communities). We will have fishing days where we will explain about the heritage of chalk stream fish, and learn about different angling practices and attitudes. Again, sharing stories and food could become a feature of these events, to break down barriers.



Bourne Rivulet

Really strong community cohesion. Sense of place along the Bourne. Wildlife groups exist. Schools are engaged.

The CCG is close to being able to run itself

“Let’s have a community bat night. A bats along the river night!”

14 core CCG members

Good wildlife skills

Strengths: event organisation; would join practical work

“Let’s compare the plants in the winterbourne when it is running and then again when it’s dry”

Access is poor but walks in the wider landscape good

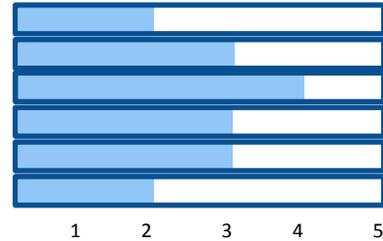
Wildlife: plants, brown trout, invertebrates

Chalk stream knowledge is good

Need: Confidence building

Our training needs: some heritage and river training.

Knowledge of rivers & heritage issues
 Skills to deliver river projects
 Connected to other stakeholders
 Ability to organise
 Potential to run themselves
 Confidence to act



Flooding is of major concern to locals on the Bourne Rivulet. An active flood group exists along the Bourne Rivulet and the local schoolchildren make early-warning flood detection systems in design and technology lessons. As flooding is so high on the agenda, there are conflicting views about the best way of managing the stream. The community would benefit from receiving information and advice on this.

The Bourne Rivulet CCG was the first community group to move towards self-governance. They discussed and loosely elected a Chair for one of the projects. They have a high level of motivation to get involved. The group has a very strong wildlife and heritage interest. There is a wildlife group, which focuses on pollinating insects and local community members have good knowledge about conservation.

Many local people joined training courses and then carried out surveys and audits in: how easy it is to access the stream, mapping invasive non-native species; testing water quality and conducting riverfly surveys.

Upper Test

Good mix of strengths in science, arts and heritage

Keen to be practical and get things done

Mixed age profile

12 core CCG members

Strong science skills

Strengths: organised; engaged; practical; connected

"Let's create and INNS challenge where we remove all invasive non-native plant species from the entire Upper Test!"

Access: variable. Good in some places, bad in others

Wildlife: brown trout, water vole, kingfisher, invertebrates

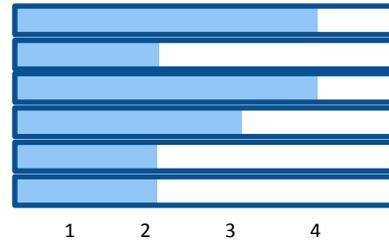
Chalk stream knowledge is high

Need: Confidence building

Our training needs: monitoring and surveying

"Let's create a community map using craft techniques to engage a wide audience! We could take it on a tour"

Knowledge of rivers & heritage issues
Skills to deliver river projects
Connected to other stakeholders
Ability to organise
Potential to run themselves
Confidence to act



"It was good to have a light supper at the meetings ... helpful to those who arrived straight from work. It created a sociable feel and made the meeting fun."

During CCG workshops the discussions and priority-setting focussed around "getting the Upper Test good".

They want to stop silt entering the stream to improve it for wildlife. They would like to raise awareness and understanding of the pressures on chalk streams and would like better access.

The community joined in all of the survey-training courses and carried out surveys for the Scheme. They are motivated to get involved.

Results from the skills audit show that they lack confidence in carrying out surveys and practical work in the stream and do not know about wider issues facing chalk streams. They are confident organising events, themselves and doing practical tasks away from the stream.

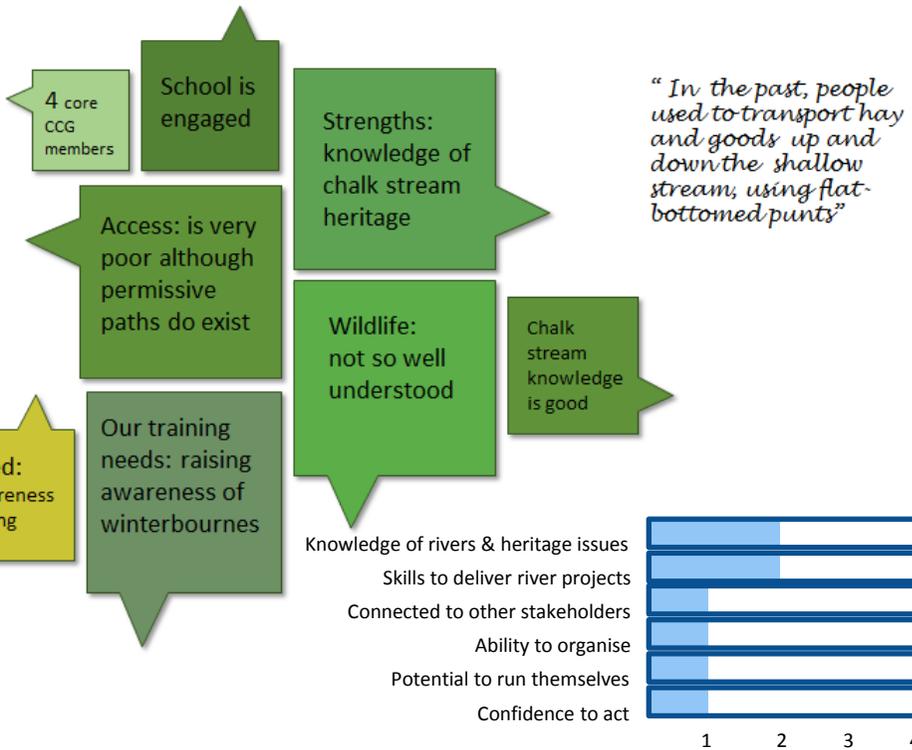




Candover Brook

Mainly either dry winterbourne or large landholdings with little access.

Landowners keen to enhance chalk stream habitat.



Candover Brook is a long stream but the community comprises a handful of landowners with large landholdings. The community at Preston Candover, the northern most point, is not well connected to the Brook as the landscape is mainly a dry winterbourne.

The primary school at Preston Candover is very interested in wildlife and there is also a new community shop with many active volunteers. Many local people regularly commute to London, so attending meetings was difficult for them. However, there was good attendance at an initial nature and heritage talk, with all ages coming to the event.

One landowner was very interested and supportive of Watercress and Winterbournes and was keen to find a suitable pond to act as a native crayfish arc site on their land. The landowner introduced the project to their neighbours. Collectively they are interested in schemes about habitat enhancement, access and heritage features. This formed the basis for the projects on the ground.

River Arle

Active group "Friends of the Arle" meeting regularly to identify projects.

A very well-connected group who are active and informed.

8 core CCG members

Strong heritage interest

Strengths: Engaged; keen to act now; organised

"We want to get things done right now. We just need the confidence to act!"

Access: very good access to the chalk stream and heritage

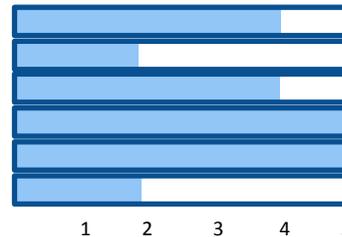
Wildlife: native crayfish, water vole, cetti's warbler, water vole, brown trout

Chalk stream knowledge is good

Need: Practical task force

Our training needs: practical skills and active volunteers

Knowledge of rivers & heritage issues
 Skills to deliver river projects
 Connected to other stakeholders
 Ability to organise
 Potential to run themselves
 Confidence to act



"we must engage with young people and school children!"



"Friends of the Arle" are an active and organised CCG. They are very concerned that they do not have younger members in the group and have already thought of ways to address this.

They have visited schools to gauge interest and have identified housing developments that might have younger residents.

The group wants to act now. During the initial engagement, one CCG member approached a local primary and secondary school to understand their interest and barriers to involvement. Indications were that they would be interested in talking further, once something more deliverable has been decided.

This CCG would benefit from learning about chalk stream ecology and wider species interactions. The group comprise individuals who are passionate about different projects and they would benefit from looking at the project with a bigger perspective. There remains a strong heritage interest.

They are concerned that they will be unable to undertake practical works, due to lack of skill or energy, but they would like to get on and easily become frustrated with lack of activity.

They are passionate about the Scheme and one landowner was keen to enhance his new land holding for wildlife in order to support it.



Cheriton Stream

Very active conservation group

Good practical skills

Good connections to landowners

"We need to educate the people who move here about their riparian responsibilities. We need to work together"

14 core CCG members

Strong practical skills

Strengths: motivated; practical; connected; respected

"Our local children grow up on the streams. They go to a school that has a streamside Forest School"

Access: is relatively good

Wildlife: native crayfish, water vole, brown trout

Chalk stream knowledge is good

Need: confidence building

Our training needs: survey skills and confidence to act

Knowledge of rivers & heritage issues

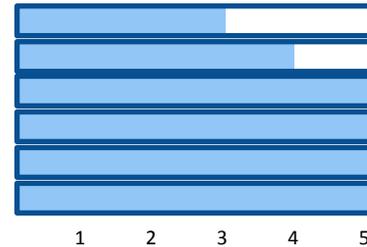
Skills to deliver river projects

Connected to other stakeholders

Ability to organise

Potential to run themselves

Confidence to act



The Cheriton CCG has good connections into the local community, including into the four large farms in the area and the National Trust property at Hinton Ampner, the school and the local shop.

The members are mainly retirees (although there are a few younger members) but they are very active and enjoy practical work across the stream. Their strength is their community involvement and passion about their stream. They are excited to be part of Watercress and Winterbournes and are proud of their local area, their heritage and wildlife. They have good water vole populations and are within the white-clawed crayfish reintroduction programme. They are extremely proud of this fact.

They could benefit from support regarding some of the issues affecting their stream (e.g. sediment entering the stream) for they do not always feel confident about carrying out surveys. Within the wider community, they could also benefit from some natural flood management information and awareness raising. There are real concerns about flooding and built structures within the flood plain (e.g. bridges) that impact their community. They have a strong focus on getting the stream in good health.

3.6 Understanding our audiences

The following chart identifies our audiences across the Scheme. We highlight local people’s motivations for getting involved, barriers preventing their engagement and the opportunities they will have through joining us on Watercress and Winterbournes.

AUDIENCE	MOTIVATIONS	BARRIERS	OPPORTUNITIES
CCG members	<ul style="list-style-type: none"> Wishing to do something for chalk streams, wildlife or heritage Happy to give time to a good cause 	<ul style="list-style-type: none"> Group unconfident, unwilling or unable to lead themselves 	<ul style="list-style-type: none"> Training courses for interested members will support them on their journey Share the progress and journeys of groups at annual Showcase events
Landowners / Managers	<ul style="list-style-type: none"> Interest in their own land holding Need to meet regulatory requirements Responding to new opportunities linked to the ‘public money for public goods’ agenda Wanting to be a good neighbour 	<ul style="list-style-type: none"> Lack of time Mistrust of environmental/ heritage organisations Lack of knowledge and skills Will it cost me money? 	<ul style="list-style-type: none"> Training Providing advice Opportunities to see examples of best practice elsewhere Peer support networks
Residential Riverside property owners	<ul style="list-style-type: none"> Interest in their own garden and its heritage Value the environmental quality and motivated to retain/ maintain it Engaged in the local community Keeping up with the Joneses 	<ul style="list-style-type: none"> Lack of knowledge and skills Unaware of riparian responsibilities Dislike of ‘being told what to do’ 	<ul style="list-style-type: none"> Training & learning activities Opportunities to see examples of best practice elsewhere Likely to respond best when change comes from within the community
Decision makers/ regulators	<ul style="list-style-type: none"> To know what is going on To find ways that the LPS can help them deliver their role and responsibility To engage with the community 	<ul style="list-style-type: none"> Time constraints Decision making processes and bureaucracy that is remote and out of step with the Scheme’s timescales Professional attitudes - we know best 	<ul style="list-style-type: none"> Opportunities to participate in events/ activities to get a first-hand experience Involvement in developing guidance/ training materials etc.

AUDIENCE	MOTIVATIONS	BARRIERS	OPPORTUNITIES
River users	<ul style="list-style-type: none"> • Considerable and growing concerns for the quality of the fishing • Extending interest to the wider environment • Engaging new and younger entrants into the sport 	<ul style="list-style-type: none"> • Exclusivity of the sport both financially and culturally • 'Tradition' – might be resistant to change 	<ul style="list-style-type: none"> • Creating a common cause • Helping this audience to see that they are part of a wider 'community of concern' • Involvement in developing guidance/ training materials etc.
Heritage Interest Groups	<ul style="list-style-type: none"> • Help deliver their organisation/ groups objectives • Extend their interest and knowledge • Create interesting activities for members 	<ul style="list-style-type: none"> • Time – already fully engaged in other things • Lack of funding • Local politics and rivalries • Lack of skills / knowledge / confidence • Frustration at time takes to deliver 	<ul style="list-style-type: none"> • Manage expectations at every meeting • Explain the process and timescales of projects • Encourage individuals to champion projects
Young people	<ul style="list-style-type: none"> • Having things to do • Activities organised through school or uniformed youth services • Have pride in local area • Opportunities to learn 	<ul style="list-style-type: none"> • It's not the thing to be seen to be doing – peer pressure • Lack of opportunities • Lack of transport • Knowing what there is to do 	<ul style="list-style-type: none"> • Education programme in schools • Gain a 'badge' or qualifications • Build on current interest in Greta Thunberg, Extinction Rebellion, etc. • Social media campaign • Opportunities to do outdoor practical work which can help with health and wellbeing
Families with children	<ul style="list-style-type: none"> • Things to do as a family • Opportunities to learn • Growing interest in outdoor activities and reducing screen time 	<ul style="list-style-type: none"> • Cost • Transport • Need to cater for different ages • Knowing what is available and how to access it 	<ul style="list-style-type: none"> • Self – guide activities such as a 'river trail', well sign posted and interpreted • Activities like geocaching • Family orientated events • Improved health and wellbeing by making connections with people with similar interests
Older people	<ul style="list-style-type: none"> • Things to do and opportunities to meet people with similar interests • Sharing knowledge and experience • Feeling valued and appreciated • Growing interest in the nature and heritage for providing ways to increase health and wellbeing 	<ul style="list-style-type: none"> • Knowing what is available and how to access it • Lack of transport • Lack of mobility and/or poor health • Lack of 'peers' to do things with • Already committed to range of activities 	<ul style="list-style-type: none"> • Telling the story of the rivers through the eyes of the people what have lived there • Intergenerational activities • Volunteering opportunities that a designed for people who are less mobile • Well-being programme

AUDIENCE	MOTIVATIONS	BARRIERS	OPPORTUNITIES
Cultural social groups	<ul style="list-style-type: none"> • Help deliver their organisation/ groups objectives • Extend their interest and knowledge • Interesting activities for their members to be involved in 	<ul style="list-style-type: none"> • Knowing what is available and how to access it • Lack of time – already fully engaged in other things • Lack of funding • Lack of skills / knowledge / confidence 	<ul style="list-style-type: none"> • Training and learning activities • Helping this audience to see that they are part of a wider ‘community of concern’ • Opportunity to participate in events to generate more support for their interest • Improving health and wellbeing through improved access to the outdoors and through connections with other local people
Andover community	<ul style="list-style-type: none"> • Value local green space and interactions with wildlife (feeding Ducks etc.) • Seen as important for Health and Wellbeing • See the river as an important part of the local scene • Opportunities to get out into other parts of the landscape 	<ul style="list-style-type: none"> • Cultural relevance • Access to the river, good in the town but perceived to be difficult in the countryside • Knowing what is available and how to access it • Time – lots of other things going on • Confidence, especially to explore the wider landscape 	<ul style="list-style-type: none"> • Community events – multi cultural river festivals • Particular concern about litter in the Rivers, so perhaps link to the plastics issue • Activities that connected people through the river with the wider W&W landscape – the ‘river as a route of discovery’ • Outdoor activities and connections with local people that can improve health and wellbeing (e.g. being outside and joining in practical jobs)
Local Businesses	<ul style="list-style-type: none"> • New customers • Economic return • Association with an interesting initiative • Community support 	<ul style="list-style-type: none"> • Lack of a champion • Lack of time and other resources • Lack of knowledge and skills to make best use of the opportunity • Not knowing what is available 	<ul style="list-style-type: none"> • Opportunities to support/ sponsor events and other activities • Regular and effective communication • Promotional material that businesses can use to engage their customers in the Scheme
Visitors	<ul style="list-style-type: none"> • Places to visit, things to see and do • Opportunities to learn about the heritage • Locally sourced food, drink and accommodation 	<ul style="list-style-type: none"> • Not knowing what is available and how to access it • Competition from other attractions e.g. Winchester • The need to ‘make a day of it’ - is there enough to see and do? 	<ul style="list-style-type: none"> • Well interpreted and waymarked trails through the landscape, linking points of heritage interest and local food and drink venues • Promotional material promoting the river environment



Section 4: The Landscape Partnership Scheme

4.1 Vision and objectives

This Landscape Partnership Scheme originated from a proposal within the Test & Itchen Catchment Partnership to carry out a more cohesive programme of works to improve the resilience of the headwaters of two of the UK's most iconic chalk rivers – the Test and the Itchen.

Discussions about how best to progress this identified that there was a need for a different approach: one where communities would take a central role and would be much more involved in both developing and delivering the Scheme.

From this we developed **our Vision** for the partnership:

“Working with communities to improve the health of our chalk streams for future generations”

Our Strapline for the Scheme : “Community action for Wilder chalk streams”

Scheme Objectives

1. Increasing the resilience and quality of our chalk stream biodiversity, reversing species declines and providing a buffer against pressures such as pollution, water extraction, and climate change.
2. Ensuring that communities play an essential role in caring for their local chalk streams and are equipped to do so.
3. Ensuring that communities can take steps to improve the health of their chalk streams by eradicating invasive non-native species, reducing identified local pollution sources, and reducing water use.
4. Ensuring that all members of the community have the opportunity to explore and celebrate their chalk stream heritage.
5. Enabling land managers to manage their land in a chalk stream-friendly way, whether they are farmers, businesses, councils, angling clubs or residents with streamside gardens.

In order to deliver these objectives, the Landscape Partnership has developed 20 projects which are clustered under the following four programmes:

Programme 1 - Resilient Chalk Streams

This programme focuses on practical work to our chalk streams and surrounding land which will restore and enhance habitats, increase their resilience to climate change and water abstraction, remove barriers to fish movement and reduce the sediment and pollution entering our chalk streams.

Programme 2 - Chalk Stream Community Action

This programme focuses on actions that the catchment communities can take to improve and celebrate their chalk streams.

Programme 3 - Exploring and Celebrating our Chalk Stream Heritage

This programme focuses on engaging a wide and diverse range of audiences to explore and celebrate our chalk stream heritage.

Programme 4 - Chalk Stream Skills

This programme focuses on building the skills of key stakeholders - land managers, volunteers and local communities - to better equip them to care for their chalk streams in the future.

The projects to be delivered within each of the programmes are listed on the following pages:



Programme 1: Resilient Chalk Streams

Project Title	Project Summary
1.1 Chalk Stream Habitat Restoration	The project will carry out prioritised river habitat and bankside improvements to support chalk stream species. This will result in habitats that are more resilient to the pressures that impact them.
1.2 Natural Flood Management	The project will use natural techniques to reduce the risk or impacts of flooding on priority areas. Using techniques which aim to prevent rainfall reaching the river valleys so quickly, by slowing overland flows (e.g. tree planting, debris dams), increasing infiltration (e.g. through improved soil management and reducing impermeable surfacing) and attenuating peak volumes (e.g. creating flood storage areas).
1.3 Stopping Sediments	Tackling ‘pathways’ which deliver sediment and nutrients from agricultural land and other surrounding land to our chalk streams. Implementation will include ‘mitigation measures’ such as sediment traps, settlement scrapes, cross drains, check dams and grips to protect the streams.
1.4 Spawning Habitats	Delivering habitat improvements to areas which could or are being used by fish to spawn, and removing man-made barriers to enable access to now inaccessible spawning grounds.
1.5 Conserving Our Native Crayfish	Supporting the survival of Hampshire’s last remaining white-clawed crayfish populations by developing a crayfish hatchery at Sparsholt College that will establish a captive-born brood stock of local provenance. These will be released into improved habitat or ‘ark’ sites remote from invasive non-native crayfish species.
1.6 Vitacress Wetland Creation Scheme	An exemplar scheme by Vitacress to reduce the sediment and phosphates being discharged into the Bourne Rivulet by creating new wetlands.

Programme 2 – Chalk Stream Community Action

Project Title	Project Summary
2.1 Building Sustainable CCGs	Continued development of the Community Catchment Groups to ensure sustainability and enable them to play an increasingly leading role in protecting and enhancing their chalk streams.
2.2 Watercress and Winterbournes Grant Scheme a) Community Grants b) Landowner Grants	a) Grant support for community-led heritage projects which will contribute towards the scheme's 5 objectives b) Capital grant scheme for landowners (farmers, vineyards, equine keepers) – on recommendation from specified land advisors.
2.3 Save Every Drop	Community water efficiency schemes aimed at encouraging people to make changes to their water usage and understand the connections between their water consumption and the health of the local chalk stream
2.4 Septic Smart	Encouraging better management of sewerage systems and septic tanks across the headwater catchment through a promotional campaign and educational work with owners and septic tank suppliers and maintenance companies.
2.5 Tackling Invasives	To control invasive species on the chalk streams and to prevent their spread. Removal will be by trained volunteers where possible but also using contractors as appropriate.

Programme 3 – Exploring and Celebrating our Chalk Stream Heritage

Project Title	Project Summary
3.1 W&W Education Programme	An education programme aimed at encouraging young people to learn more about their local chalk stream and associated heritage. Two strands – one aimed at schools and home education groups, connecting local heritage to the national curriculum and the second aimed at uniformed groups, connecting local heritage activities to achieving badges.
3.2 Roaming by the River	Access focussed project aimed at making identified river walks more accessible. Improvements include changing stiles to kissing gates, provision of new seating, and signage and improving year-round use of paths through surfacing.
3.3 Restoring our Chalk Stream Structures	Restoring & celebrating the built heritage structures on the chalk streams, associated with water meadow systems.
3.4 Tales from the Riverbank	<p>A project aimed at getting local communities connecting with their chalk stream heritage:</p> <ul style="list-style-type: none"> • Photography competition and exhibition with a specific section for young people to encourage involvement by that age group. • Literary competition and festival aimed at exploring the writers and poets that have been inspired by the chalk streams, and encouraging young people to try nature writing. • Local stories exhibition aimed at telling the stories of local people and their connections with chalk streams.
3.5 Hidden Treasure Trails	Engaging audiences with their local chalk stream through special-interest walks, local walking routes and walking games for young people.
3.6 Open Chalk Streams	Our Open Chalk Streams project will give local communities the opportunity to visit and appreciate some private stretches of their local river, which will be opened on specific dates, in the style of the National Garden Scheme.

Programme 4: Chalk Stream Skills

Project Title	Project Summary
4.1 Chalk Stream Events	Learn all there is to know about the heritage of chalk streams and the Watercress and Winterbournes area – an ongoing programme of talks and workshops by volunteers and specialists aimed at all members of the community learning more about Watercress and Winterbournes heritage.
4.2 Chalk Stream Champions	A continuing programme of training for volunteers involved in the scheme to develop their skills in a range of areas including: water quality monitoring, species monitoring and identification, communications and social media training, INNS identification, health and safety training and tools training.
4.3 Chalk Stream-Friendly Land Management	<p>An ongoing programme of events and on-site workshop sessions and advice visits aimed at improving the management of riparian land and those in the surrounding catchments who can have an impact on the chalk streams. These will be targeted at the following identified audiences:</p> <ul style="list-style-type: none">• Farmers• Equine owners / keepers• Owners / managers of winterbournes• Agronomists, contractors and land agents• Councils managing riparian land• Riparian garden owners

4.2 The Landscape Partnership Board

The Landscape Partnership is led by Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust. This duo has extensive experience in catchment-scale partnership working from co-hosting the Test & Itchen Catchment Partnership in which Watercress and Winterbournes has its roots. From the outset, the Test & Itchen Catchment Partnership was keen to develop a board of organisations that is dynamic and represents all aspects within Watercress and Winterbournes and ensures coverage of all interests within the Scheme.

All partners signed a Memorandum of Understanding (MoU) to form a Partnership Board during the Development Phase, which has now been reviewed and revised into a Partnership Memorandum of Agreement (MoA) for the Delivery Phase. The Board consists of 15 organisations, as below:



The Board has convened regularly throughout the Development Phase and members have worked together to:

- Develop the Scheme's vision, objectives and plan the Scheme's legacy
- Ensure collaboration and co-operative working to draw together all the projects that link to form the Scheme by coordinating and focusing effort and resources
- Engage and co-ordinate with Community Catchment Groups to facilitate the inclusion of both partner-led and community-led projects
- Encourage and secure the active participation of the wider communities, landowners and businesses in the Scheme area

The purpose of the Board going forwards is to guide and monitor the delivery of the Scheme. It will:

- Manage and ensure the implementation of the programmes by co-ordinating and focussing effort and resources
- Contribute their extensive experience and knowledge towards individual projects and the overall Scheme
- Review and scrutinise the progress made through the Scheme
- Monitor and evaluate the Scheme's outputs and outcomes and ensure adherence to the terms of the NLHF contract of grant

4.3 Delivery team

A team of six will be employed by Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust for the day-to-day management of Watercress and Winterbournes. The team will include the following:

- Partnership Manager (full-time)
- Community Catchment Officer (full-time)
- Projects and Conservation Officer (full-time)
- Communications and Events Officer (full-time)
- Education Officer (part-time)
- Support Officer (part-time)

The full Watercress and Winterbournes delivery structure can be found in Figure 11.

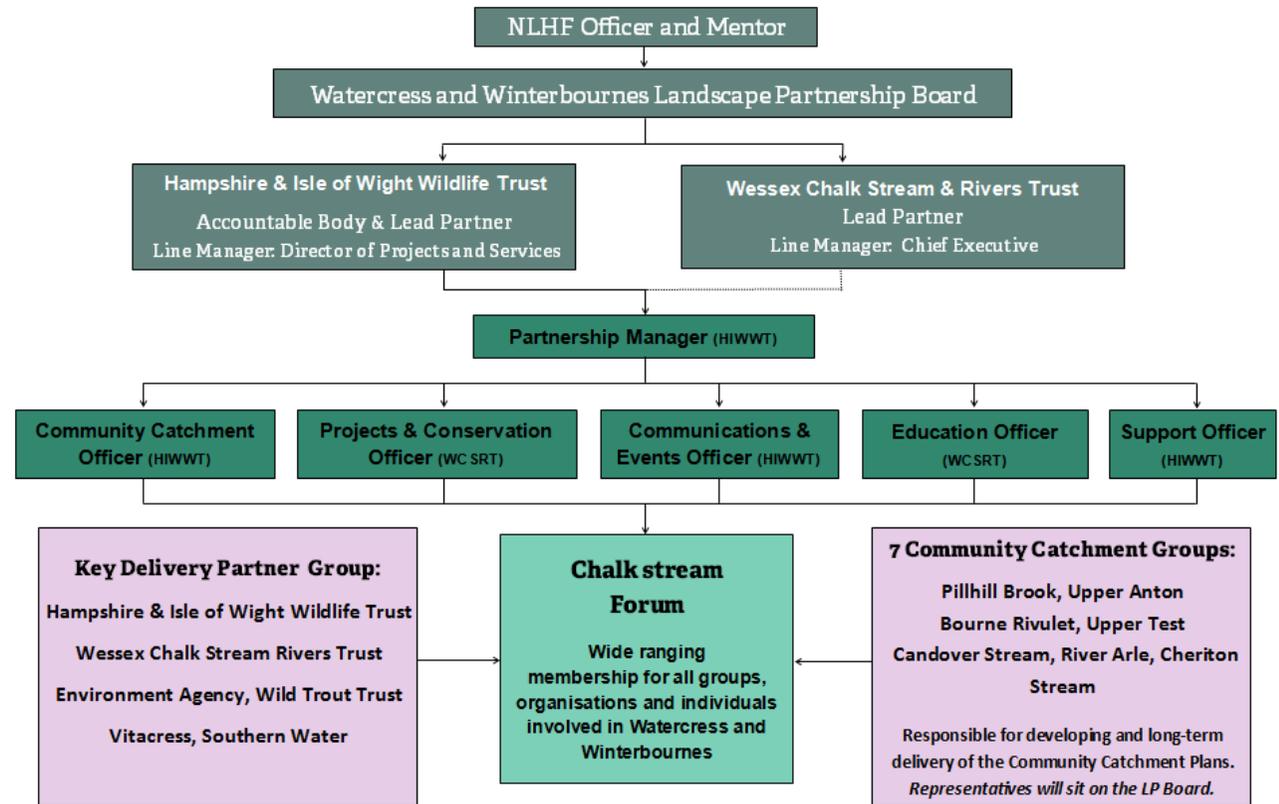


Figure 11 Watercress and Winterbournes structure

4.4 Chalk Stream Champions

Volunteer and community involvement form the backbone of Watercress and Winterbournes. It is essential to success and the main driver in making the change towards the sustainable management of the landscape. Many projects in the Scheme have Chalk Stream Champion roles, allowing them to be involved through various activities (as shown in Figure 12 overleaf). Our community will receive a wide range of benefits from being involved in the Scheme including:

- Learning new skills
- Improved self-confidence and motivation
- Improved health and wellbeing from spending time outdoors and increased social interaction
- Enthusiasm and connection to the heritage on their patch
- Increased sense of ownership and sense of place

Our volunteer recruitment process can be found in **Appendix 6**.





Figure 12 Volunteering opportunities available through Watercress and Winterbournes

4.5 Community Catchment Plans

In each catchment the Scheme brings together partners, community groups, landowners, fishing interests and other stakeholders to develop and deliver a holistic plan for their catchment and community. Each plan sets out actions to protect built and natural heritage, and to tackle the issues identified during initial surveys and workshops. The plans provide a framework for each community to be able to care for its own chalk stream, and will help to deliver existing aspirations (e.g. from Parish and Neighbourhood Plans) as well as new projects. Locally-specific activities developed in different workshops have been agreed by each community and taken forwards as part of the wider scheme of works.

It is clear from the work with the Community Catchment Groups that local people really care about their streams. Across the board they are interested in the water quality, understanding the key pressures and how to mitigate them, and how to progress forwards with building their resilience into the future. They want a holistic approach whereby a variety of audiences from young to old, and from different backgrounds, can enjoy and appreciate their natural heritage as well as learning about the cultural heritage of their local areas. Each area has their specific aims which have been included amongst the collection of projects that have been developed.

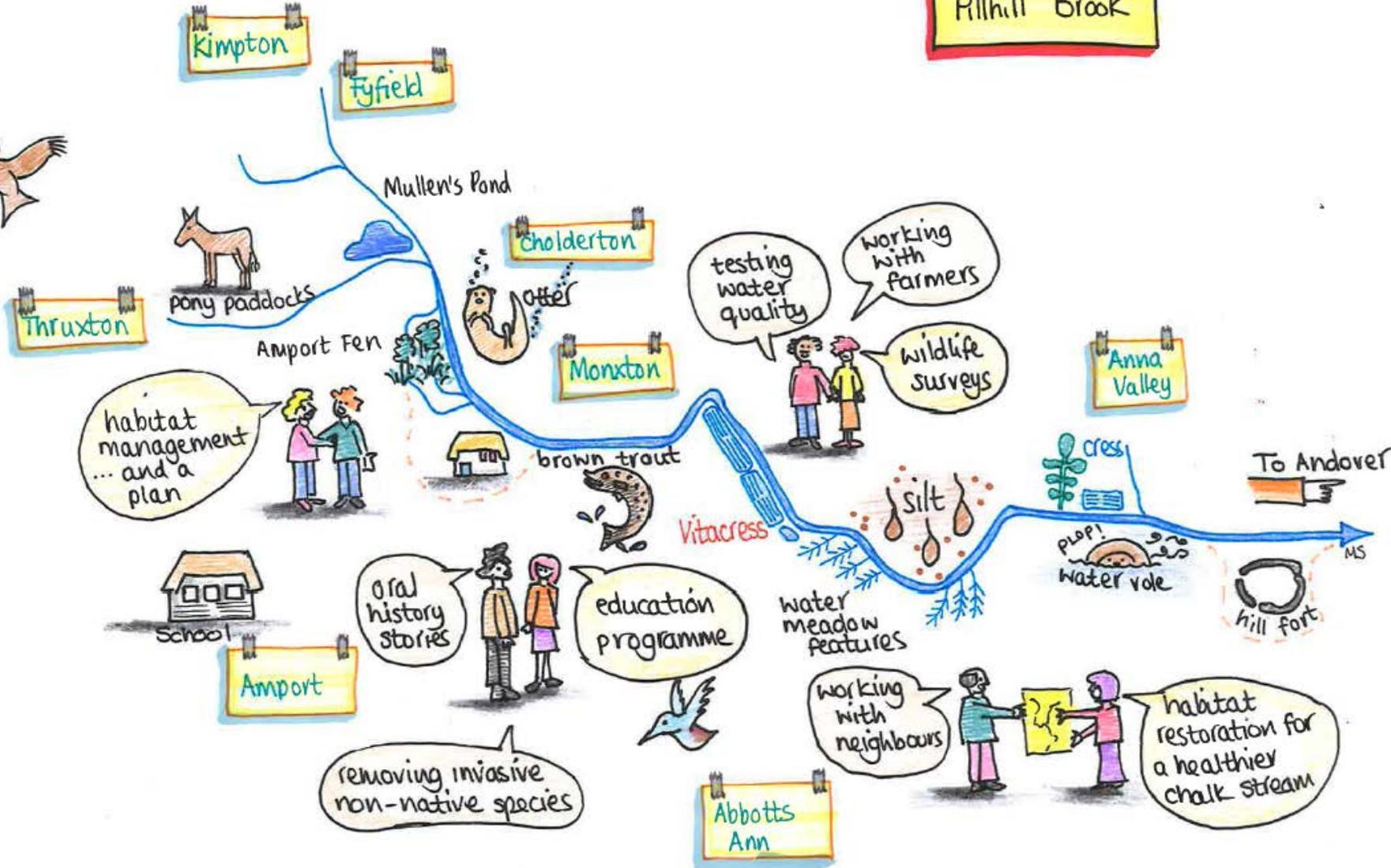
The Community Catchment Plans are both a summary of the key issues for each specific catchment, as well as a celebration of the unique qualities that each has to offer. They will be used as an indicator to plan future education and conservation action, both throughout the Scheme and beyond, helping communities to look at the opportunities available.

They are working documents and a starting block that can be continuously added to and amended as new information is gathered about the different areas, and as projects are developed and completed.

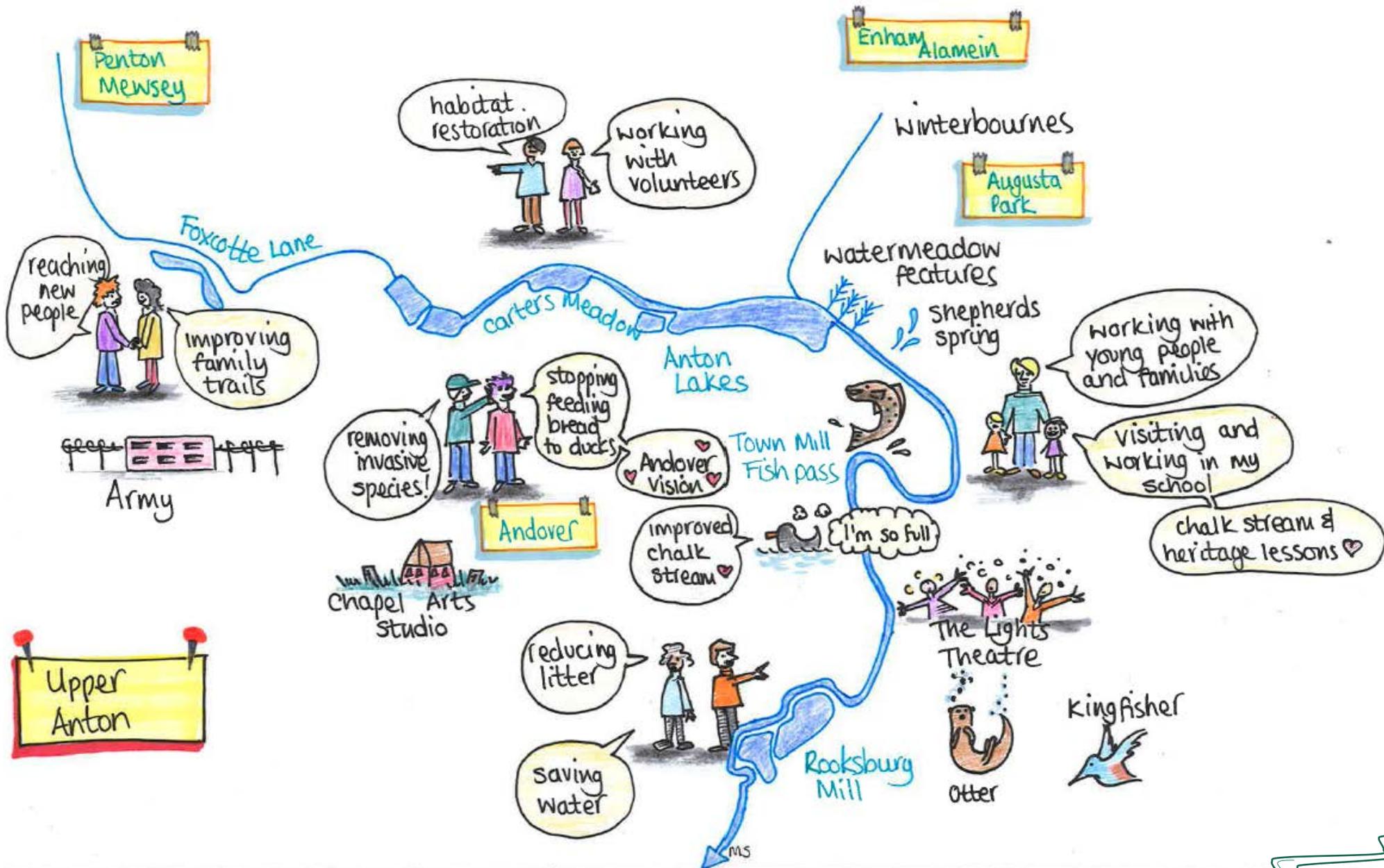




Pillhill Brook



Priorities identified on the Pillhill Brook	Actions to be taken	Project
To understand the water quality in the stream to improve biodiversity and resilience	<ul style="list-style-type: none"> • Catchment-wide monthly water quality monitoring • Up-skill volunteers to be able to undertake monitoring 	4.2 Chalk Stream Champions
To identify and record the wildlife within the catchment	<ul style="list-style-type: none"> • Provide wildlife surveyor training to community members and CCG groups to improve knowledge • To provide a learning programme providing talks and workshops 	4.1 Chalk Stream Events 4.2 Chalk Stream Champions
To increase awareness of the heritage and fragility of chalk streams	<ul style="list-style-type: none"> • Education and awareness raising of heritage • To provide a learning programme providing talks and workshops by specialists • To open up private areas of the stream for the community to appreciate heritage features 	3.6 Open Chalk Streams 4.1 Chalk Stream Events
To remove invasive non-native species and educate the community of the threat	<ul style="list-style-type: none"> • Volunteer-led and contractor-led removal of invasive species • Raising awareness of the issues surrounding INNS • Continued training of volunteers to be able to identify and remove INNS in the future 	2.5 Tackling Invasives 4.2 Chalk Stream Champions
To improve access to the stream to engage the community	<ul style="list-style-type: none"> • To make improvements to existing rights of way in line with actions found during the access audits • To create a series of trails for a wide audience so that children and adults can learn and celebrate their chalk stream environments • To allow access to currently private areas during organised events to allow the community to get closer to their streams • To hold events that will engage the local community to get more involved in their chalk stream environments • Working with a local parish council to enhance existing access to enhance the area and create a space for enjoyment by the community 	3.2 Roaming by the River 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 3.6 Open Chalk Streams
To improve the habitat and river quality for wildlife and people	<ul style="list-style-type: none"> • Undertake habitat and river restoration works in the catchment with contractors and volunteers • Creation of a 'rock ramp' to allow fish to travel upstream to areas previously blocked by a barrier to fish • Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To reduce water use in the catchment to improve resilience and improve the health of their chalk stream	<ul style="list-style-type: none"> • Work with the residents of the local community and educate them in where their water comes from and encourage a reduction in water usage 	2.3 Save Every Drop



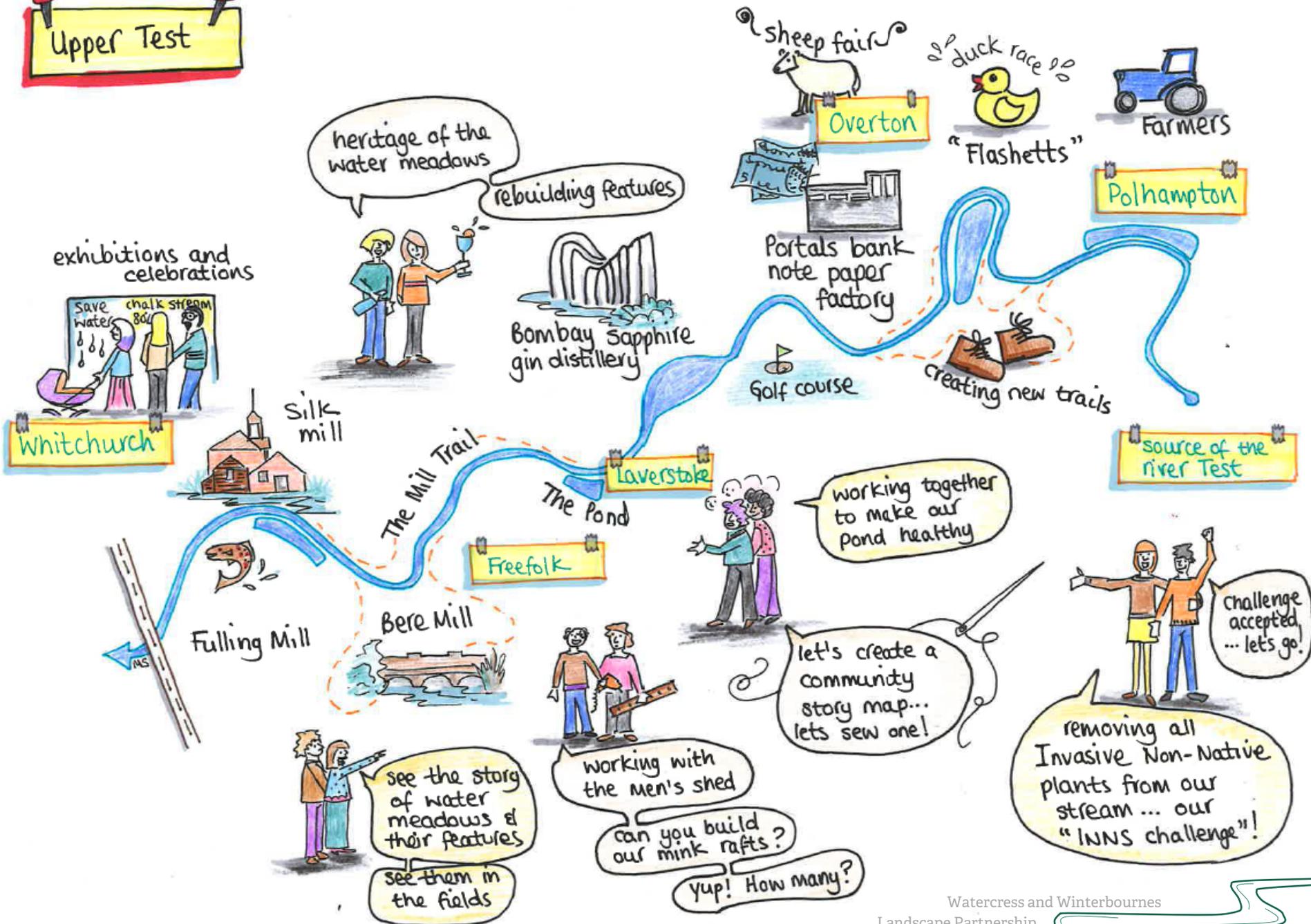
Priorities identified on the Upper Anton	Actions to be taken	Project
To provide access opportunities which will allow people to engage with chalk stream heritage, both natural and cultural	<ul style="list-style-type: none"> To make improvements to existing rights of way in line with actions found during the access audits To create a series of trails for a wide audience so that children and adults can learn and celebrate their chalk stream environments To allow access to currently private areas during organised events to allow the community to get closer to their streams To hold events that will engage the local community to get more involved in their chalk stream environments 	3.2 Roaming by the River 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 3.6 Open Chalk Streams
To encourage responsible behaviour around and along the river that will improve people's experiences, and support improvements of habitat	<ul style="list-style-type: none"> To raise awareness with locals and visitors about the issues bread feeding causes To encourage people to feed ducks with an alternative to bread To encourage local shops and the pub to stock bird seed packets 	1.1 Chalk Stream Habitat Restoration
To increase the removal of invasive non-native species and raise awareness through education	<ul style="list-style-type: none"> Volunteer-led and contractor-led removal of invasive species Raising awareness of the issues surrounding INNS Continued training of volunteers to be able to identify and remove INNS in the future 	2.5 Tackling Invasives 4.2 Chalk Stream Champions
To improve the habitat quality for wildlife and people	<ul style="list-style-type: none"> Undertake habitat and river restoration works in the catchment with contractors and volunteers Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To improve the quality of the water in the streams to improve the health of the catchment	<ul style="list-style-type: none"> Undertake habitat and river restoration works in the catchment with contractors and volunteers Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment Get the community involved with a series of workshops / talks and other communications to encourage best practice To provide a programme of events, on-site workshops and advice targeted at improving land management for chalk streams to key audiences Provide a grants scheme for landowners to deliver 'river-friendly' land improvements as recommended by land advisors 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 2.3 Save Every Drop 2.4 Septic Smart 4.2 Chalk Stream Champions 4.3 Chalk Stream-Friendly Land Management
To get the community involved in caring for their local chalk stream and giving them the skills to do so	<ul style="list-style-type: none"> To educate the community in all there is to know about the natural and built heritage of chalk streams in their local area To provide a wide variety of training opportunities for volunteers to get involved in the Scheme 	3.4 Tales from the Riverbank 4.1 Chalk Stream Events 4.2 Chalk Stream Champions

Bourne Rivulet



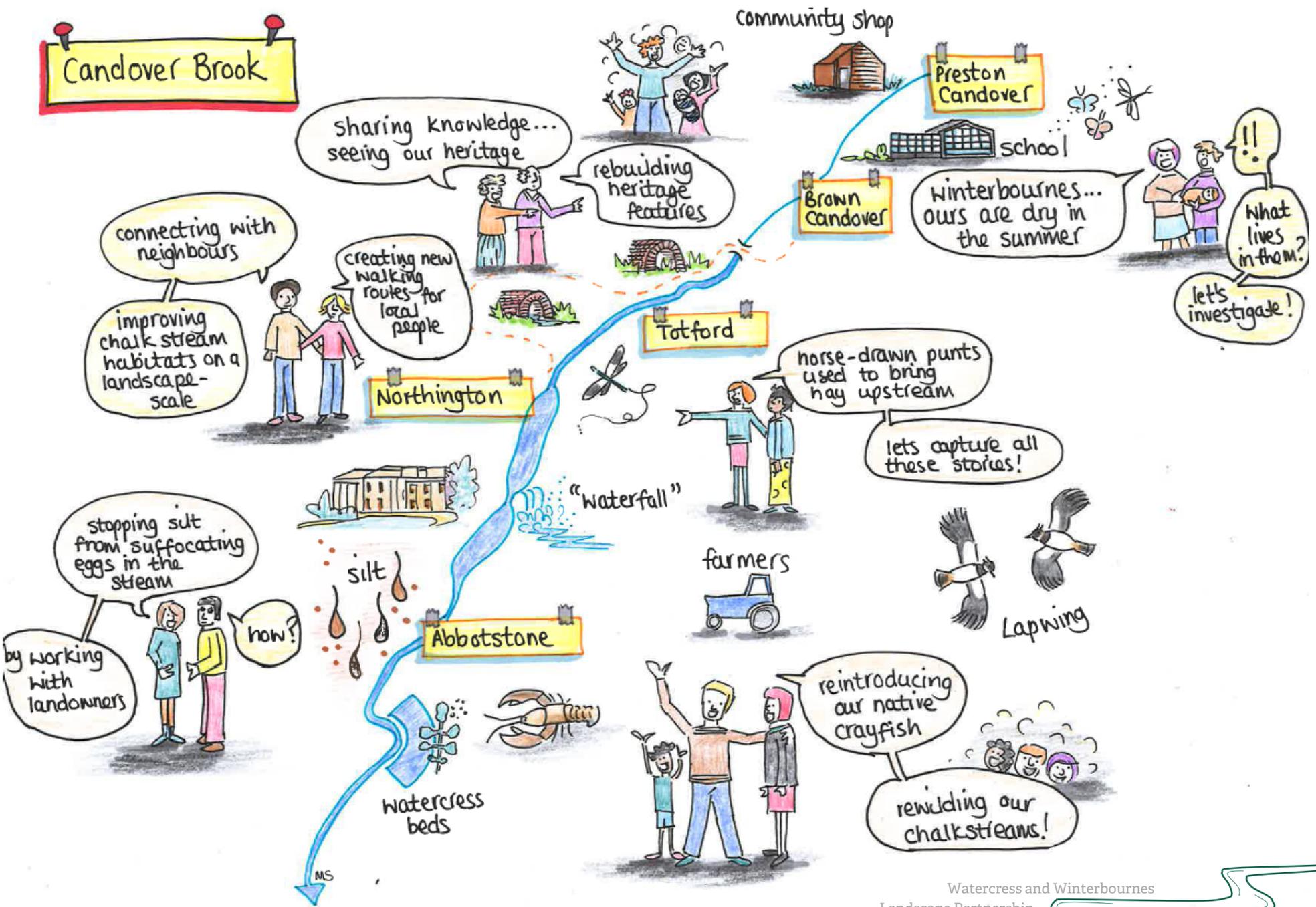
Priorities identified on the Bourne Rivulet	Actions to be taken	Project
To undertake a hydrogeological study for the purpose of reducing the impact of sediment	<ul style="list-style-type: none"> • Undertake habitat and river restoration works in the catchment with contractors and volunteers • Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment • To introduce fencing to the stretch to stop livestock poaching and reduce bank erosion 	1.3 Stopping Sediments 4.2 Chalk Stream Champions
In-stream monitoring for biodiversity that could be mapped and monitored over time	<ul style="list-style-type: none"> • To provide a wide variety of training opportunities for volunteers to get involved in the Scheme 	4.2 Chalk Stream Champions
To educate landowners on how to manage their riparian/winterbourne land	<ul style="list-style-type: none"> • To provide a programme of events, on-site workshops and advice targeted at improving land management for chalk streams to key audiences • Provide a grants scheme for landowners to deliver 'river-friendly' land improvements as recommended by land advisors 	2.2 W&W Grant Scheme 4.3 Chalk Stream-Friendly Land Management
To increase community opportunity for walking and connecting with chalk stream heritage and wildlife	<ul style="list-style-type: none"> • To make improvements to existing rights of way in line with actions found during the access audits • To create a series of trails for a wide audience so that children and adults can learn and celebrate their chalk stream environments • To allow access to currently private areas during organised events to allow the community to get closer to their streams • To hold events that will engage the local community to get more involved in their chalk stream environments 	3.2 Roaming by the River 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 3.6 Open Chalk Streams
To improve the habitat quality for wildlife and people	<ul style="list-style-type: none"> • Undertake habitat and river restoration works in the catchment with contractors and volunteers • Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To improve the water quality of runoff/waste from watercress farms and salad processing	<ul style="list-style-type: none"> • To develop an exemplar scheme for the watercress & salad processing industry demonstrating the enhanced management of sediment and other outputs • Creation of a three-pond wetland scheme • To educate the community about the issues surrounding the area and how to improve the quality of the stream • To educate other watercress & salad businesses about the environmental impacts they have on their water environment 	1.6 Vitacress Wetland Creation Scheme

Upper Test



Priorities identified on the Upper Test	Actions to be taken	Project
To increase community opportunity for walking and connecting with chalk stream heritage and wildlife	<ul style="list-style-type: none"> To make improvements to existing rights of way in line with actions found during the access audits To create a series of trails for a wide audience so that children and adults can learn and celebrate their chalk stream environments To allow access to currently private areas during organised events to allow the community to get closer to their streams To hold events that will engage the local community to get more involved in their chalk stream environments 	3.2 Roaming by the River 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 3.6 Open Chalk Streams
To remove all invasive flora and educate people about the impact of spreading INNS	<ul style="list-style-type: none"> Volunteer-led and contractor-led removal of invasive species Raising awareness of the issues surrounding INNS Continued training of volunteers to be able to identify and remove INNS in the future 	2.5 Tackling Invasives 4.2 Chalk Stream Champions
To educate landowners on how to manage their riparian/winterbourne land	<ul style="list-style-type: none"> To provide a programme of events, on-site workshops and advice targeted at improving land management for chalk streams to key audiences Provide a grants scheme for landowners to deliver 'river-friendly' land improvements as recommended by land advisors 	2.2 W&W Grant Scheme 4.3 Chalk Stream-Friendly Land Management
To enhance Laverstoke Pond, making it a space for locals to enjoy and appreciate their water environment	<ul style="list-style-type: none"> To make improvements to existing rights of way to allow better access to the site for a wide range of audiences Move the fence line to allow for better access to the site Create platforms that overhang the pond so that the community can get closer and improves enjoyment of the habitat 	1.1 Chalk Stream Habitat Restoration 3.2 Roaming by the River
To improve the habitat quality for wildlife and people	<ul style="list-style-type: none"> Undertake habitat and river restoration works in the catchment with contractors and volunteers Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To restore and celebrate built heritage structures associated with water meadows	<ul style="list-style-type: none"> Use both contractors and volunteers to restore historic structures associated with our old water meadows Raise awareness of the built heritage in the project area Educate the community about water meadows and the role they play in the landscape 	3.3 Restoring our Heritage Structures 4.1 Chalk Stream Events 4.2 Chalk Stream Champions
To get the community involved in caring for their local chalk stream and giving them the skills to do so	<ul style="list-style-type: none"> To educate the community in all there is to know about the natural and built heritage of chalk streams in their local area To provide a wide variety of training opportunities for volunteers to get involved in the Scheme 	3.4 Tales from the Riverbank 4.1 Chalk Stream Events 4.2 Chalk Stream Champions

Candover Brook



Priorities identified on the Candover Brook	Actions to be taken	Project
To celebrate and increase awareness of local heritage	<ul style="list-style-type: none"> To create a series of trails and hold guided walks for a wide audience so that children and adults can learn and celebrate their chalk stream heritage To hold events that will engage the local community to get more involved in their chalk stream environments Restore heritage structures on public rights of way using volunteers to engage the local community in the areas built heritage 	3.2 Roaming by the River 3.3 Restoring our Heritage Structures 3.5 Hidden Treasure Trails 4.1 Chalk Stream Events
To improve an existing walking route to make it circular and give a higher heritage value	<ul style="list-style-type: none"> To make improvements to existing rights of way in line with actions found during the access audits To allow access to currently private areas during organised events to allow the community to get closer to their streams To explore the potential of extending permissive access on privately-owned land to create a circular route 	3.2 Roaming by the River 3.6 Open Chalk Streams
To improve and protect river habitat along a stretch of the stream upstream of the Grange Lakes	<ul style="list-style-type: none"> Undertake habitat and river restoration works with contractors and volunteers to reduce sediment input into the stream and increase flow diversity To introduce fencing to the stretch to stop livestock poaching and reduce bank erosion 	1.1 Chalk Stream Habitat Restoration 1.2 Natural Flood Management 1.3 Stopping Sediments
To increase the removal of invasive non-native species and raise awareness through education	<ul style="list-style-type: none"> Volunteer-led and contractor-led removal of invasive species Raising awareness of the issues surrounding INNS Continued training of volunteers to be able to identify and remove INNS in the future 	2.5 Tackling Invasives 4.2 Chalk Stream Champions
To improve the habitat quality for wildlife and people	<ul style="list-style-type: none"> Undertake habitat and river restoration works in the catchment with contractors and volunteers Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To reduce the volume of fine sediment getting into the stream	<ul style="list-style-type: none"> Undertake habitat improvement works in the catchment to increase flow to reduce the volume of sediment settling on the river floor To provide a programme of events, on-site workshops and advice targeted at improving land management for chalk streams to key audiences Provide a grants scheme for landowners to deliver 'river-friendly' land improvements as recommended by land advisors 	1.3 Stopping Sediments 2.2 W&W Grant Scheme 4.3 Chalk Stream-Friendly Land Management
To secure the long-term survival of white-clawed crayfish in Hampshire	<ul style="list-style-type: none"> To release captive-born white-clawed crayfish into the Candover Brook To increase public awareness of the species and the threats they face 	1.5 Conserving our Native Crayfish

River Arle



Priorities identified on the River Arle	Actions to be taken	Project
To provide opportunities for engagement with the chalk stream and its heritage through walking routes	<ul style="list-style-type: none"> To make improvements to existing rights of way in line with actions found during the access audits To create a series of trails for a wide audience so that children and adults can learn and celebrate their chalk stream environments To allow access to currently private areas during organised events to allow the community to get closer to their streams To hold events that will engage the local community to get more involved in their chalk stream environments 	3.2 Roaming by the River 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 3.6 Open Chalk Streams
To collect scientific data to inform and educate the wider community about the chalk stream and the issues facing it	<ul style="list-style-type: none"> To provide a wide variety of training opportunities for volunteers to get involved in the Scheme To hold events that will engage the local community to get more involved in their chalk stream environments and educate about the issues facing them 	4.1 Chalk Stream Events 4.2 Chalk Stream Champions
To create a new nature reserve and manage it to be an example of best practice to others	<ul style="list-style-type: none"> To provide a programme of events, on-site workshops and advice targeted at improving land management for chalk streams to key audiences To encourage scheduled access to the area to educate the community and show as an example of best practice 	3.6 Open Chalk Streams 4.3 Chalk Stream-Friendly Land Management
To improve the habitat quality for wildlife and people	<ul style="list-style-type: none"> Undertake habitat and river restoration works in the catchment with contractors and volunteers Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment Restore a well-used public footpath to reduce bank erosion and improve the habitat for wildlife as well as improving public access 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To secure the long-term survival of white-clawed crayfish in Hampshire	<ul style="list-style-type: none"> To increase public awareness of the species and the threats they face To provide a series of workshops / talks by specialists to educate the community 	1.5 Conserving our Native Crayfish 4.1 Chalk Stream Events
To educate landowners on how to manage their riparian/winterbourne land	<ul style="list-style-type: none"> To provide a programme of events, on-site workshops and advice targeted at improving land management for chalk streams to key audiences Provide a grants scheme for landowners to deliver 'river-friendly' land improvements as recommended by land advisors 	2.2 W&W Grant Scheme 4.3 Chalk Stream-Friendly Land Management
To reduce water use in the catchment to improve resilience and improve the health of their chalk stream	<ul style="list-style-type: none"> Work with the residents of the local community and educate them in where their water comes from and encourage a reduction in water usage 	2.3 Save Every Drop

Cheriton Stream



Priorities identified in the catchment	Actions to be taken	Project
To reduce the impact flooding has on the village through awareness raising	<ul style="list-style-type: none"> • Creation of a Natural Flood Management scheme to alleviate some of the flood issues in the area • Raise awareness of the issues of flooding and how they can be lessened through Natural Flood Management • Educate the local community on how their actions can add to the risk of flooding and encourage best practice in the village • Reduce the volume of sediment getting into the streams by delivering improvements in priority areas 	1.2 Natural Flood Management 1.3 Stopping Sediment 4.1 Chalk Stream Events
To raise awareness of the problems caused by soil and silt entering the chalk stream	<ul style="list-style-type: none"> • To engage school children and uniformed groups in an education programme • To educate the community in all there is to know about the natural and built heritage of chalk streams in their local area • To provide a wide variety of training opportunities for volunteers to get involved in testing for water quality and other aspects of the scheme 	3.1 Watercress and Winterbournes Education Programme 4.1 Chalk Stream Events 4.2 Chalk Stream Champions
To improve the local village green that runs along the stream for the enjoyment of the local community	<ul style="list-style-type: none"> • To work with the local community and a local nursery to design and create a small wild flower meadow on the village green that will enhance the area and reduce sediment input into the stream • To improve elements of public access by installing benches 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediment 3.2 Roaming by the River
To increase the removal of invasive non-native species and raise awareness through education	<ul style="list-style-type: none"> • Volunteer-led and contractor-led removal of invasive species • Raising awareness of the issues surrounding INNS • Continued training of volunteers to be able to identify and remove INNS 	2.5 Tackling Invasives 4.2 Chalk Stream Champions
To improve public access and allow the community to connect more with their chalk stream environments	<ul style="list-style-type: none"> • To make improvements to existing rights of way in line with actions found during the access audits • To create a series of trails for a wide audience so that children and adults can learn and celebrate their chalk stream environments • To allow access to currently private areas during organised events to allow the community to get closer to their streams • To hold events that will engage the local community to get more involved in their chalk stream environments 	3.2 Roaming by the River 3.4 Tales from the Riverbank 3.5 Hidden Treasure Trails 3.6 Open Chalk Streams
To improve the habitat quality for wildlife and people	<ul style="list-style-type: none"> • Undertake habitat and river restoration works in the catchment with contractors and volunteers • Creation of management plans for priority areas for landowners / community to follow and better manage areas in the catchment 	1.1 Chalk Stream Habitat Restoration 1.3 Stopping Sediments 1.4 Spawning Habitats
To secure the long-term survival of white-clawed crayfish in Hampshire	<ul style="list-style-type: none"> • To release captive-born white-clawed crayfish into the Cheriton Stream • To increase public awareness of the species and the threats they face 	1.5 Conserving our Native Crayfish

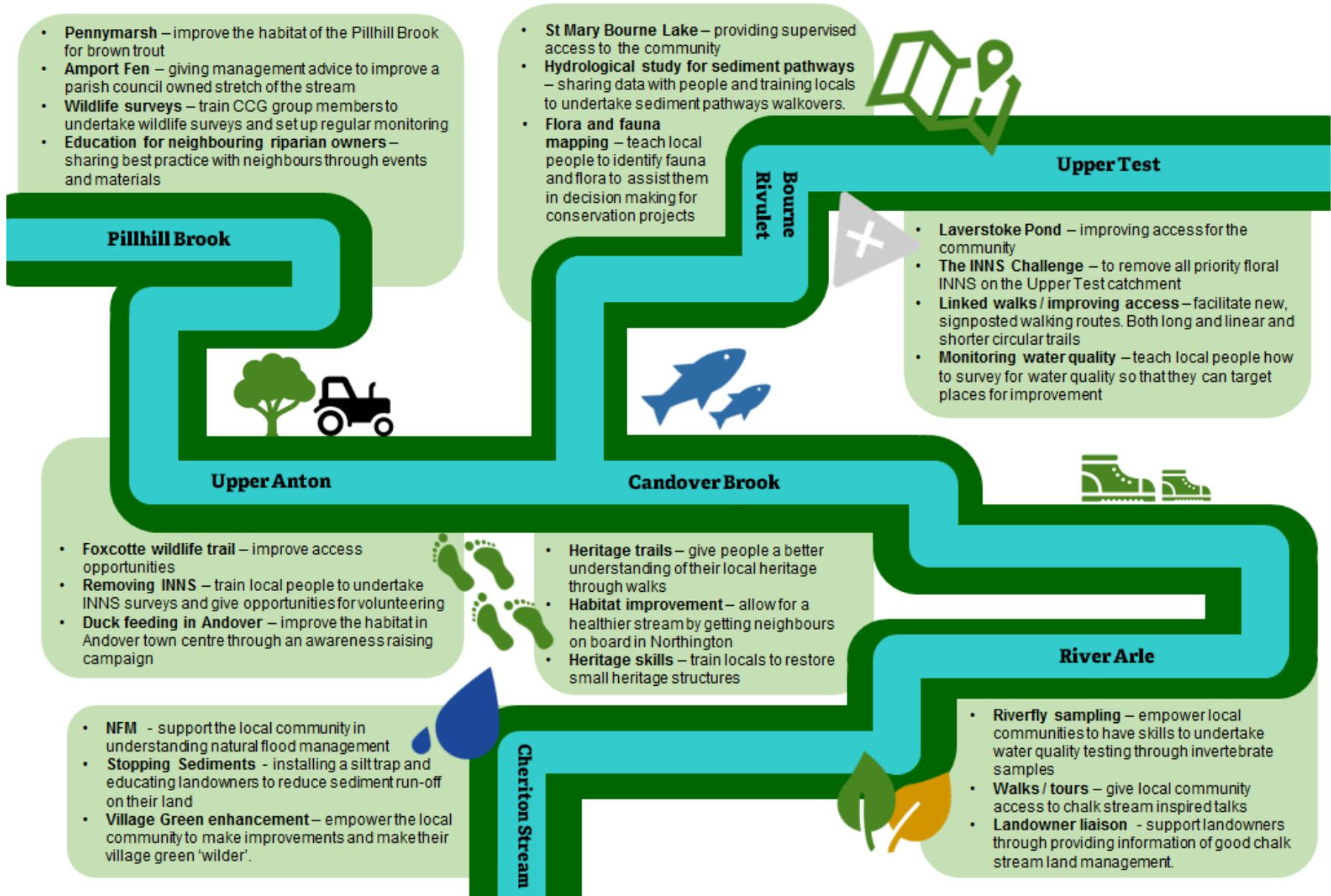


Figure 13 How CCG projects fit within Watercress and Winterbournes



Section 5: Individual projects

5.1 Project summaries

The following pages provide a summary of the projects that make up the Scheme (detailed project plans can be found in Part 2 of the LCAP):

- 1.1 Chalk Stream Habitat Restoration
- 1.2 Natural Flood Management
- 1.3 Stopping Sediments
- 1.4 Spawning Habitats
- 1.5 Conserving our native Crayfish
- 1.6 Vitacress Wetland Creation Scheme
- 2.1 Building Sustainable CCGs
- 2.2 Watercress and Winterbournes Grants Scheme
- 2.3 Save Every Drop
- 2.4 Septic Smart
- 2.5 Tackling Invasives
- 3.1 Watercress and Winterbournes Education Programme
- 3.2 Roaming by the River
- 3.3 Restoring our Chalk Stream Structures
- 3.4 Tales from the Riverbank
- 3.5 Hidden Treasure Trails
- 3.6 Open Chalk Streams
- 4.1 Chalk Stream Events
- 4.2 Chalk Stream Champions
- 4.3 Chalk Stream-Friendly Land Management

During our Development Phase, consultation with the wider community has led to us adding in a number of new projects to reflect their ideas. Some projects were specifically highlighted and had elements designed by our Community Catchment Groups, projects with these are shown with this symbol ...



Programme 1: Resilient Chalk Streams

1.1 Chalk Stream Habitat Restoration



The chalk rivers and floodplain wetlands are impacted by a range of pressures including pollutants, climate change and inappropriate management. This project provides a unique opportunity to pull together a range of initiatives designed to improve and protect the chalk streams, tributaries and associated wetlands of the two most famous chalk streams in the world. It seeks to protect and preserve those sections of the stream with heritage value, whilst seeking to enhance degraded reaches by manipulating the shape of the channel and empowering the owners and local users with the knowledge and skills necessary to pass on these fragile ecosystems in better shape than they are currently in. This project seeks to enhance degraded habitats and reintroduce management where it is lacking. Restoring natural processes to river channels by improving connectivity and restoring morphological processes will also underpin the local ecology, as well as the economic value of these chalk streams.

Outputs

- 2.5 kilometres of chalk stream and 0.2 square kilometres of floodplain habitat will be improved through restoration or enhancement
- 2490 hours (312 days) of 'Volunteer' time spent on the 14 habitat restoration / enhancement projects
- 42 volunteers will receive upskilling and knowledge about the best-practice management of river and floodplain habitats, plus obtaining practical restoration skills
- 21 management plans will be produced in partnership with land owners / managers
- 200 people will be reached each year through Duck Feeding in Andover awareness campaign.

Outcomes

- Priority species (water vole, crayfish, salmonids) and habitats will be in better ecological status within restored or enhanced sites post project
- An increased perception of 'engagement and ownership' with the headwater habitats amongst engaged volunteers
- The presence of 42 well-trained volunteers across the catchment area, facilitating continued management of river and floodplain habitats post 2025.
- A direct increase in amenity value for local communities – many of which already value these environments highly.
- People will learn about the issues of feeding ducks bread and chose other options.



Lead

WCSRT



Other partners

WTT, EA, NE, Test & Itchen Association



Locations

In all catchments



Audiences

Landowners, tenants, community groups



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£238,531



Pennymarsh– Pillhill Brook

This project proposal sets out a range of habitat enhancement options for a 0.7km stretch of the Pillhill Brook at Little Ann in Hampshire. These will include:

- Selective coppicing of willow adjacent to the river channel.
- Creation of brushwood ledges for improved juvenile fish cover and to help diversify the channel planform.
- Replacing existing muddy cattle drinking bays with two floodplain -off-line drinking bays connected to the river with buried balancing pipe.
- Creation of 5 new pool and run features
- Strategic tree planting.
- Creation of a new “soft” toe to approximately 250m of linear bank adjacent to the existing hard bank defences of properties bordering the river.

Carters Meadow – Upper Anton

Carter’s Meadow is a wetland site along the Upper Anton comprising a small on-line lake, areas of wetland and grassland habitat, and including a section of the Upper Anton stream. An outline design proposal has been developed with the aim of improving the habitat conditions and flow within the chalk stream channel, and enhancing the terrestrial wetland habitats for biodiversity. It suggests:

- The modification / disconnection of a small on-line lake to reduce the potential for river flow to pick up nutrients and sediment.
- The creation / enhancement of areas of wetland habitat, potentially through vegetation control and tree management works.
- The removal of failing bank revetments and their replacement with bioengineered alternatives.
- The removal or modification of an in-channel structure to improve conveyance.





Our headwater communities are affected by flooding from a range of sources (principally groundwater, but also surface water flooding), and traditional engineering techniques are often not a cost-effective or environmentally acceptable means of reducing that risk in these small, rural communities.

We will use techniques which aim to prevent rainfall reaching the river valleys so quickly (reducing flood peaks and flood flows), by slowing overland flows (e.g. tree planting, debris dams), increasing infiltration (e.g. through improved soil management and reducing impermeable surfacing) and attenuating peak volumes (e.g. creating flood storage areas and enhancing flooding – river connectivity).

Advice and guidance events will also be given to help communities better manage the balance between flood and environmental protection, so that action is undertaken sympathetically.

Outputs

- 100m of chalk stream habitat better managed in St Mary Bourne
- 2500 square metres of land in Cheriton better managed for water storage and for decreasing flows
- NFM actions implemented in St Mary Bourne and Cheriton that will reduce flood risk in 4 villages and 1 hamlet
- 2 guidance notes to encourage and support NFM activity
- 14 volunteers are involved in delivering NFM measures or monitoring work totalling 78 volunteer days
- 80 community members, parish councillors and landowners attend NFM events

Outcomes

- Chalk stream habitat less damaged by flooding and silt input
- People, property and infrastructure are better protected from flooding
- People understand the need to work sympathetically to protect their chalk stream heritage
- Communities understand how their land management can play a part in managing flood risk and work collectively to achieve this
- Volunteers understand the role of land management and NFM measures in reducing flooding and can implement small changes that will reduce flood risk to their area. Increased feeling of control over the flooding issue
- People have the skills needed to balance flood and environmental protection.



Lead

WCSRT / EA



Other partners

WTT, NE, HCC



Locations

Cheriton Stream & Bourne Rivulet



Audiences

Riparian owners, river managers, engineers, CCGs, local groups and businesses



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£40,975



Fine sediment smothers gravels in the streams, negatively impacting upon invertebrate and fish communities. Roads, tracks and footpaths act as pathways, delivering sediment and nutrients from agricultural land and other surrounding land to the chalk streams. Poaching and use of the streams by livestock is a significant issue.

This project will implement mitigation measures to identified target sites which will reduce the volume of sediment getting into the watercourses in the seven catchment areas. Interventions installed will include stock exclusion fencing, sediment traps and improved surfacing to fords and byways.

Outputs

- Mitigation measures installed at 14 sites across the targeted catchments, achieving 7km of river enhanced
- Water turbidity readings upstream to downstream of 14 delivery sites will be decreased by >50% (on average) post works.

Outcomes

- Fine sediment and nutrient input reduced resulting in healthier chalk headwaters and a within status WFD waterbody improvement where applicable
- Greater connection of people with their local environment / natural heritage
- Greater sense of ownership of their local area
- Increased amenity and aesthetic value of headwaters for the public, landowners and river users.



Lead

WCSRT



Other partners

EA, NE



Locations

In all catchments



Audiences

Landowners, land managers,
local groups, agricultural
community



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£87,888



Providing passage around historic structures will allow fish to by-pass obstructions and reach historic breeding grounds once again. Methods used will be a combination of alterations or complete structure removal to allow passage for fish, or the creation of new passages to by-pass structures.

Where currently-accessible sites do not provide the conditions required, river restoration will remove accumulated sediments and improve flows to keep the gravels clear. The areas will become suitable spawning grounds, supporting the survival of struggling salmonids in particular.

Outputs

- 5 kilometres of chalk stream (including high quality spawning habitat) will be made accessible to a variety of fish species.
- 5 management plans will be produced in partnership with land owners / managers to agree management of sites where fish passage has been improved.

Outcomes

- At the 5 structures altered by the project for the benefit of fish passage, surveys of fish communities (by electric fishing survey) will reveal a beneficial change in composition of upstream community.
- The improvement of impacted natural heritage environments (barriers to fish passage) will result in a direct increase in amenity value for local communities (visibility of fish and wild fishing opportunity) – many of which already value these environments highly.



Lead

WCSRT
WTT



Other partners

EA



Locations

In all catchments



Audiences

Local interest groups, CCGs,
landowners, river keepers,
members of the public



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£60,936

Programme 1: Resilient Chalk Streams

1.5 Conserving our Native Crayfish



This project will develop a crayfish hatchery at Sparsholt College that will establish a captive-born brood stock of native crayfish of local provenance, which will be reared and then released within the W and W area. Students will help to run the hatchery and the principles of crayfish conservation will be integrated into the teaching curriculum and research projects. Open days and talks will engage local communities and raise awareness of the specialness of this small creature.

Three of the chalk streams within the W and W area are home to Hampshire's last remaining robust white-clawed crayfish population. Conservation efforts to ensure their survival have so far prevented their loss and enabled the species to expand its range but the population remains vulnerable and isolated. This project will increase their numbers and reach.

Outputs

- Establishment of a local crayfish hatchery and brood stock of 100+ individuals
- Extend the upstream limit of distribution of white-clawed crayfish by 100m and 400m on the Candover and Cheriton Streams respectively
- 250 students learning more about native crayfish through teaching and research programmes
- Create one or more ark sites
- Open the facility to the public during 4 open days and deliver a presentation in each catchment
- 10 students trained to assist with crayfish husbandry
- 168 volunteer hours from students assisting with husbandry

Outcomes

- Increase the robustness and the security of the long-term survival of white-clawed crayfish of River Itchen provenance
- Increase of the knowledge of Sparsholt College students with regards to the ecology and conservation of white-clawed crayfish.
- Increase the knowledge of the public within and beyond the catchment communities with regards to the ecology and conservation of white-clawed crayfish resulting in greater appreciation / sympathetic behaviour changes in audiences
- Considerable increase in the knowledge of a small sub-set of students in regards to the husbandry, ecology and conservation of white-clawed crayfish



Lead

HIWWT



Other partners

Sparsholt College,
BZS, CCGs



Locations

Sparsholt
Agricultural College



Audiences

Students of Sparsholt,
members of the public



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£82,240



Vitacress will develop an exemplar scheme for the watercress industry by creating a series of new wetland ponds on their St Mary Bourne site, which will manage sediment and phosphate outputs from the watercress farm, drastically reducing the amount which will be discharged into the Bourne Rivulet. This is a massive investment for Vitacress and is a pilot for the watercress industry although it has been based on designs that have been successful in reducing sediment and phosphate discharges elsewhere.

The project aims to provide an answer for environmental impacts on the water environment that are created in the watercress & salad processing industry. The project will monitor the effectiveness of the scheme and will promote and disseminate information as it develops to raise awareness of the opportunities for other businesses.

Outputs

- 3 new wetland / pond systems
- 14,167m² of new wetland habitat
- Suspended solids decreased from c4mg/l to c2mg/l
- Phosphate levels decreased from annual average of c0.07mg/l to c0.04mg/l
- Five events focused on watercress heritage and the way watercress production has changed over time
- 125 people attend events to learn more about their local heritage
- Attendance at Bourne Rivulet Initiative and involvement with Community Catchment Groups

Outcomes

- Improved water quality of effluent from watercress farm and salad processing
- Reduction in nutrient and sediment content of effluent compared to influent
- Fewer pollutants entering the Bourne Rivulet
- Bourne Rivulet in better condition
- People know more about the watercress industry and its heritage within the area
- Increased understanding of how commercial watercress farming and salad washing addresses and monitors environmental impacts – less local conflict



Lead

Vitacress



Other partners

W&W core staff



Locations

Lower Link Farm,
St. Mary Bourne



Audiences

Watercress growers and salad
industries, local communities



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£6,000



CCGs, comprising interested local people, exist in each of the 7 catchments. These groups will take an active role in the delivery of Watercress and Winterbournes and will act as representatives of their wider local community.

It is important that the needs of these CCG groups are met, to keep them interested in Watercress & Winterbournes and motivated to take part in the Scheme. This project will give them the skills, knowledge and confidence to take an active role locally and to maintain the group into the long-term in whatever form is most appropriate for them. It is important that this project constantly evolves with the growth of the CCGs.

Outputs

- 80 people will have become involved in receiving training; volunteering; attending general training courses; and will have better access to information.
- 78 km chalk streams will have improved heritage
- 120 CCG members and volunteers attending and sharing news and progress.
- 25 CCG members will have received more specific training (e.g. brick pointing).
- 80 people involved in leading on delivery of their community catchment plan.

Outcomes

- People will appreciate chalk stream heritage and will have the confidence to encourage others to manage it better.
- The chalk streams will be improved and in a healthier condition (assessed via ongoing monitoring by CCGs).
- Local people will be able to recognise and record heritage features.
- Group members will be willing to govern the CCG groups in a format of their choice beyond the end of W&W.
- CCGs who have confidence to take the lead in delivering aspects of their community catchment plan, in proposing and planning new projects on their chalk stream.
- Community members with a greater knowledge of their chalk stream and the impacts on it.



Lead

HIWWT



Other partners

WCSRT



Locations

Local catchments



Audiences

CCG members, local communities



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£18,193



The Watercress and Winterbournes Grant Scheme will offer grants of up to **£5,000** for projects that meet the requirements of one of two targeted funding programmes:

- A: Community Grants- revenue grants for community-led projects which protect and celebrate the area's chalk stream heritage
- B: Landowner Grants – capital grants for landowners to deliver 'chalk stream-friendly' land improvement works as recommended by Watercress and Winterbournes land advisors.

The Watercress and Winterbournes landscape is wonderfully rich and the cultural and natural heritage that it supports has proved an inspiration to past and current generations. However, some aspects of the landscape are little understood or in need of enhancement to ensure its qualities continue to be enjoyed by future generations. The Grant Scheme is designed to galvanise and enable communities and landowners to meet these needs.

Outputs

- Minimum of 10 projects supported through the grant scheme focussed on improving land management
- 5 community projects supported by the grant scheme focussed on restoring and caring for built and natural chalk stream heritage
- 25 people actively involved in leading activities to care for or celebrate their chalk stream heritage
- 150 people learning about heritage – and celebrating the unique qualities of the chalk stream heritage through a range of activities
- Range of volunteering activities from recording, monitoring, organising, stewarding, practical conservation etc.
- Implementation of 5 schemes designs to reduce pesticide run-off into the watercourses

Outcomes

- Filtering out pesticides before they reach the watercourse using enhanced microbial activity to breakdown pesticides
- Reduced poaching of watercourses and therefore reduced sediment getting into the chalk streams
- Restoration of chalk stream heritage for future generations
- Local people empowered to lead activities to care for or celebrate their chalk stream heritage
- People making changes to their lifestyles to help look after their local chalk stream
- Participants have ongoing interest in chalk stream heritage
- More people inspired to continue contributing to the management and celebration of their local chalk stream



Lead

HIWWT



Other partners

CCGs, land advisors,
W&W board



Locations

Scheme - wide



Audiences

CCGs, landowners, other
community groups



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£110,810



This is a community water saving project which aims to raise the awareness of the connection between the water we use and the amount of water within and health of the local chalk stream. The project will encourage and support small changes within households and through changes in behaviour which will result in reduced water usage within the W and W communities. The project is a pilot for Southern Water to be able to see if a more community-involved approach combined with engagement about local environmental issues can result in increased water savings. It will deliver a series of launch events in each area aimed at encouraging people to sign up to audit visits. At the audit visits, households will be told about the most practical ways that they can save water and can have appropriate equipment fitted to help them with this e.g. water efficient shower heads, dual flushes for toilets. Each community will have its own launch and a set amount of time in which to sign up to the audits in order to create a buzz within the community to create the change required.

Outputs

- 15% less water used by participating households
- 1000 people attending local water saving events
- 10% of households (3882) receiving water efficiency visits
- 14 x Community Catchment Group members will have an increased understanding of the connection between water use and the health of the chalk stream
- 100 volunteer hours assisting with water saving events
- 20 x Community Catchment Group members will be involved in running events
- 40,000 people reached with communications about water efficiency / health of chalk stream messaging.

Outcomes

- Local chalk streams are healthier and more resilient due to lower abstraction needs
- People are more aware of how their own water usage can impact on their chalk stream health
- People adopting and maintaining water saving behaviour
- Lessons learnt for the efficient and effective delivery of community water-saving projects that can be used for scale-up and replication
- People will share their knowledge with other community members and encourage behaviour change within the community
- Community members will have learnt skills in running events and have increased knowledge on water efficiency in their local area



Lead

HIWWT



Other partners

Southern Water,
CCGs



Locations

Across six of the
catchments (not Cheriton)



Audiences

Local residents, local
businesses



Timetable

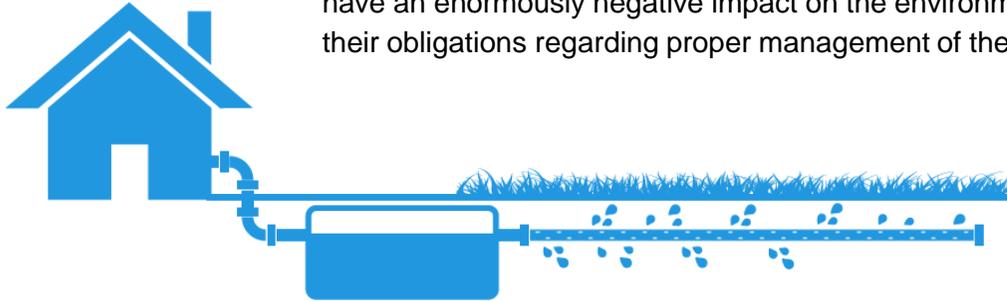
Y1 Y2 Y3 Y4 Y5



Cost

£410,290

Householders often appear unaware of the best practice management and legal obligations relating to the ownership of septic tanks. Inappropriate use and poor maintenance results in the discharge of contaminated wastewater and effluent, which can have an enormously negative impact on the environment. It is therefore very important that septic tank owners are aware of their obligations regarding proper management of their sewerage system.



The project will:

- Raise awareness about the legal obligations of septic tank owners to properly manage their systems.
- Raise awareness about the impact of poor septic tank management on the health of the chalk streams.
- Effect behaviour change to improve septic tank management.

Outputs

- 3,800 residents with septic tanks engaged with
- 15 estate agents and solicitors engaged with
- 10 businesses with septic tanks engaged with
- 10 septic tank sales and maintenance companies engaged with
- 20 Chalk Stream Champions engage with residents and businesses
- 2,000 leaflets disseminated to new residents with septic tanks in 'new home' packs
- 7,000 leaflets disseminated to current residents and businesses with septic tanks
- 1 septic tank management video produced

Outcomes

- Residents improve their septic tank management, leading to lower nitrate levels in the target areas' chalk streams
- Businesses improve their septic tank management, leading to improvements in the health of the chalk streams
- Chalk Stream Champions gain valuable experience and opportunities to apply their skills
- Increased understanding among residents, businesses and estate agents and solicitors about the environmental impacts and legal responsibilities related to septic tanks
- Information about the environmental impacts and legal responsibilities related to septic tank use will be available to a greater number and variety of people

 Lead HIWWT	 Other partners EA, CCGs, Chalk Stream Champions	 Locations Across the seven catchment	 Audiences Householders and businesses with septic tanks	 Timetable Y1 Y2 Y3 Y4 Y5	 Cost £11,530
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Controlling invasive non-native species (INNS) requires a number of collective actions to really have an effect. We need to understand what species are present and where, how to best remove them and prevent their spread, and to help these actions be most effective by engaging with people most likely to inadvertently cause their spread. This programme will therefore encompass 3 components:

- Controlling invasive non-native species, preventing their spread within the headwaters and beyond, and removing them where possible.
- An awareness-raising road-show to prevent the spread of INNS by gardeners & anglers
- Training community and fisheries volunteers to survey & monitor for INNS and undertake appropriate control.

Outputs

- 46 km of river receiving INNS monitoring, reporting and removal
- 21 mink rafts in place
- 21 volunteers trained and monitoring INNS
- 21 volunteers are more confident about identifying mink activity
- 504 volunteer hours recording / monitoring INNS
- 378 volunteer hours removing INNS
- 70 people attend the W&W Forum / training events
- 3 nurseries and garden centres engaged with the programme
- 350 people attend the roadshow events

Outcomes

- Water & terrestrial habitat is cleared of INNS, with volunteers playing an active role in on-going management, supporting re-establishment of native species
- Mink numbers are reduced, with volunteers playing an active role in on-going monitoring of mink, protecting species such as water vole and fish
- Volunteers are more confident and competent about the management of their local environment
- People avoid purchase of INNS, and know what action to take to reduce / remove INNS they find
- People are equipped to identify and remove INNS



Lead

HIWWT



Other partners

EA, NE



Locations

Across the seven catchments



Audiences

Landowners, river keepers, local groups, residents



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£60,166



This project will educate young people, teachers and group leaders on the importance of chalk rivers and the impact that everyday choices have upon them. This will be achieved through a bespoke education programme focusing on local chalk stream heritage in its widest sense, including industrial and cultural heritage. Information from a school questionnaire has been used to shape the project and will be used to inform the content and format of the teacher training and educational resources during the Delivery Phase of the project. The project will deliver two strands – one aimed at schools and home education groups, connecting local heritage to the national curriculum and the second aimed at uniformed groups, connecting local heritage activities to achieving badges.

The project will also deliver teacher / leader training events to encourage education providers and group leaders to deliver their own local heritage activities into the long-term.

Outputs

- At least 7 schools will have engaged with the project each year
- At least 2 Youth groups will have engaged with the project each year
- 30 education sessions delivered every year reaching 3,750 young people
- 8 training courses delivered for teachers and youth leaders to enable them to deliver chalk stream heritage sessions themselves

Outcomes

- Young people are more aware of how their actions can impact on the health of their chalk stream
- Young people will be able to tell others why chalk streams are so special and why we should care about them
- Teachers and group leaders will feel confident about identifying chalk stream species.
- Young people will have a deeper understanding of how chalk streams have influenced settlements over time, and of the wildlife present in them.
- Teachers and leaders will be better able to incorporate local chalk stream heritage into their activities with young people.
- Education providers and youth leaders will better appreciate these special places and their heritage.

 Lead WCSRT	 Other partners WTT, HIWWT	 Locations Schools and communities across the catchments	 Audiences Schools, home education groups, uniformed groups	 Timetable Y1 Y2 Y3 Y4 Y5	 Cost £27,000
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This project will improve both physical and intellectual access to the chalk streams for local communities. Improvements have been identified by the local communities themselves during access audits that they carried out during the Development Phase. The access improvements proposed include improving surfacing on some key paths, changing stiles to kissing gates, the provision of new seating, stabilising riverside walks that are eroding and damaging the river banks and the provision of viewing platforms.

Alongside these physical access improvements, we will also be installing interpretation about significant heritage features and trails where they have been identified by the local community as being important. Local community members will be trained as access wardens who can report problems and carry out small maintenance / waymarking tasks.

Outputs

- 8 stiles will be replaced with kissing gates
- 1 bridge repaired
- 5 benches installed
- 70 hours of volunteer time spent making access improvements
- 2 stretches of river having path improvements

Outcomes

- Local communities take a leading role in developing improved access in their area
- Volunteers will gain skills in improving physical access to the chalk streams
- Less-abled community members and parents with pushchairs will be able to access the chalk stream more easily
- Communities in close proximity to the streams have a better appreciation for their environment as they can now access areas they were previously unable to
- More people accessing the chalk stream so engaged in their local heritage



Lead

HIWWT



Other partners

HCC, CCGs, landowners



Locations

Across the seven catchments



Audiences

Community members, walking groups, young people



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£46,492



During the Development Phase we identified some of the significant built heritage structures associated with our chalk streams that are in need of restoration. These included the Eel House on the Arle and a range of water meadow structures throughout all of the catchments. Specialist advice has allowed us to pinpoint the most significant and prioritise these for restoration purposes. Some of the most significant will be addressed through this project with the main focus on two of the water meadow structures (a bridge and complex hatch pool) at Bere Mill on the Upper Test, which have been identified as having national importance. We will also be supporting the landowner at Itchen Stoke Mill on the Candover to restore his water meadow structures himself and will be training a team of volunteers to help at Bere Mill and Itchen Stoke Mill and to restore some of the smaller scale structures that have been identified by local communities.

Outputs

- 8 restored structures subject to long-term maintenance agreements
- 8 significant chalk stream structures restored and safeguarded from further deterioration
- 10 new water meadow systems recorded on the Heritage Environment Record
- 20 local people will be trained in the restoration of brick structures using traditional methods
- 500+ people will know more about their chalk stream heritage
- 20 volunteers with skills in brick heritage structure restoration resulting in 750 volunteer hours

Outcomes

- Restored water meadow structures managed in a way that will minimise future deterioration
- Up to date records of the water meadow systems available to the public
- Volunteers will have key new skills that they will be able to apply to a wider range of heritage structures both during and beyond the project
- Volunteers will have gained a greater awareness of the importance of the landscape and heritage
- Landowners have greater knowledge of the significance of the heritage on their land
- Greater awareness in local people that the chalk streams have played a part in our land management and food heritage

 Lead HIWWT	 Other partners EA, NE, HBPT, Landowners	 Locations Bere Mill, Upper Test, Itchen Stoke, Candover Brook	 Audiences Landowners, CCGs, volunteers, heritage groups	 Timetable Y1 Y2 Y3 Y4 Y5	 Cost £48,312
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This project will celebrate the chalk streams as a source of creative inspiration through literature, photography, and storytelling. For centuries the chalk streams have inspired residents and visitors alike; many have expressed their experiences through creative means, while others are still waiting for their stories to be told.

This special landscape has caught the imagination of Jane Austen and Thomas Hardy, and been immortalised in acclaimed novels *The Water Babies* and *Watership Down*. Its unique qualities have been captured in visual form by countless artists, and preserved by local residents as fascinating stories and cherished memories. This project will showcase and continue this rich creative tradition.

Outputs

- 200 people enter the photography competition
- 150 young people enter the literary competition
- 50 people share chalk stream stories and associated photographs / maps / items
- 50 Chalk Stream Champions assist with project activities
- 450 people attend the photography exhibition
- 100 people attend literature festival events
- 450 people attend the stories exhibition
- 10 Chalk Stream Champions collect chalk stream stories
- 1 literary celebration video produced
- 1 chalk stream stories video produced

Outcomes

- Richness of the chalk stream and central role that chalk streams play in local lives better recorded
- Chalk stream champions gain valuable experience and opportunities to apply their skills
- Increased understanding of the rich cultural heritage of the streams; encouragement to care for them and engage with them creatively
- Local communities / people working together to deliver heritage projects, building community spirit
- People will have been inspired by their chalk stream heritage
- Greater sense of ownership of their local area
- Greater connection of people with their local heritage

 <p>Lead</p> <p>HIWWT</p>	 <p>Other partners</p> <p>n/a</p>	 <p>Locations</p> <p>Across the seven catchments</p>	 <p>Audiences</p> <p>Local residents, community groups, visitors</p>	 <p>Timetable</p> <p>Y1 Y2 Y3 Y4 Y5</p>	 <p>Cost</p> <p>£25,260</p>
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CASE STUDY #1



Years 1-2: Photography

This project strand will engage local people with their chalk streams through photography. We will hold a photography competition with the following categories: Heritage; Wildlife; Landscape; People; Community Choice; Young Photographer.

The entries will be judged by local photographers. The Community Choice winner will be decided by a public vote. To encourage youth participation, the Young Photographer category will only be open to under-18s.

The winning entries receive prizes and be turned into a roving exhibition hosted at venues across the Scheme area.

CASE STUDY #2



Years 2-3: Creative writing

This project strand will engage local people with their chalk streams through literature. It will showcase and continue the rich heritage of the streams as a source of literary inspiration.

We will explore past and present chalk stream-inspired literature through a festival of events, featuring local poets and authors. We will also engage young people through a poetry and short story competition.

The winners will receive cash prizes and a limited edition booklet containing the winning entries. Prizes will be awarded at an event for the winners.

CASE STUDY #3



Years 3-5: Community stories

This project strand will engage local people with their chalk streams by sharing their experiences. Chalk Stream Champions will be trained to gather stories related to the streams from people in their communities.

We will seek a diversity of ages, occupations, and topics in our interviewing, but maintain a strong thematic connection to the streams.

These stories will be recorded in audio form, and made available in multiple formats through Scheme communications. A selection will also be turned into a roving exhibition.



This project will celebrate and showcase the hidden treasures of the chalk streams – their vibrant wildlife and fascinating heritage features. Found almost nowhere else on earth, the chalk streams are home to an amazing abundance of characterful species – many of these are rare and unable to thrive in other environments. The streams are also peppered with the echoes of human activity; adjacent fields are marked with strange patterns from old water meadows, while mysterious structures speak of trades ranging from gin distillation to paper production.

While central to the story of the chalk streams, this diverse wildlife and richness of heritage remain unknown to many local people, in particular the young. This project will use interactive wildlife and heritage trails, enhanced by guided walks, to uncover these chalk stream secrets and how they continue to shape the landscape today.

Outputs

- 8 wildlife trails created
- 35 heritage plaques installed
- 96 guided walks delivered
- 20 Chalk Stream Champions deliver guided walks
- 30 young people participate in wildlife trail focus groups
- 450 people use the wildlife trails
- 30 people participate in the heritage features consultation
- 300 people use the heritage trails
- 800 people attend guided walks

Outcomes

- Richness of the chalk streams is better recorded and communicated
- Chalk Stream Champions gain valuable experience and opportunities to apply their skills
- Increased understanding of the wildlife of the chalk streams; encouragement to care for it and engage with it through the trails and guided walks
- Opportunities to learn about and engage with chalk stream heritage will be accessible to a wider audience
- Improved sense of place and community involvement, enhanced learning and engagement offer for local people and visitors



Lead

HIWWT



Other partners

n/a



Locations

Across the seven catchments



Audiences

Local residents, community groups, visitors



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£51,070



Local communities often have restricted access their local chalk stream due to private land ownership. Open Chalk Streams will give local people the opportunity to visit a chalk stream. They will have the opportunity to join a guided walk or enjoy the stream independently. Opportunities will be provided for people to learn about their chalk stream (e.g. through hearing about it from the landowner, tour guide or from reading some on-site material). Landowners will be able to share their knowledge and passion about their stream.

This project is important because local people want to see and experience their local chalk streams. People need a connection to their stream in order to care about it and act to look after it. Access will create experiences, opportunities for learning and people will be inspired.

Outputs

- 51 riverside sites open for visits and the sharing of knowledge in Year 1
- 7 landowners will have recognised and learnt about their own heritage features
- 30 packs of educational material / support documentation produced.
- 21 people will have supported the event, either volunteering to open their chalk stream, or helping a neighbour
- At least 1,050 people will take the opportunity to get close to the chalk streams

Outcomes

- Community seeing and learning about heritage features
- Appreciation of riparian management and inspiration regarding potential careers or volunteering opportunities
- People will have learnt about the pressures facing chalk streams
- People will have enjoyed spending time with nature around chalk streams and will be better engaged with their local heritage
- People will have been inspired to make a change to benefit chalk streams
- An increasing number of people will have enjoyed visiting the normally hidden stream and heritage

 Lead HIWWT	 Other partners Riparian landowners	 Locations Across the seven catchments	 Audiences Landowners, volunteers, local groups, residents	 Timetable Y1 Y2 Y3 Y4 Y5	 Cost £30,810
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Chalk Stream Events will deliver an ongoing programme of events and activities that will have something to appeal to all members of the community.

The programme aims to inspire and interest people in their local chalk stream heritage and will be delivered by a mix of specialists and volunteers who are knowledgeable in subjects as diverse as the heritage of watercress growing (from those who worked in the industry), the heritage of fly-fishing, searching for signs of water vole and otter, wildlife photography and painting, chalk stream poetry, water meadows through the ages, the role of the river keeper and much more. This project has been clearly shaped by the ideas and requirements of the CCGs and the wider communities.

Outputs

- 80 events and activities will bring 1500 local people together, enabling access to some areas they may not have been able to visit before
- 4 events targeted at winterbourne land owners and managers
- 15 volunteers share their specialise knowledge and skills with others
- 120 volunteer hours

Outcomes

- Communities in the W&W area know more about their local heritage
- Local people are inspired by their chalk stream heritage
- Winterbournes are in better condition due to better management
- More people will have volunteered time
- Local people are empowered to share their knowledge and skills
- A wider range of people, including young people, will have engaged with their local heritage
- Good community cohesion and community involvement



Lead

HIWWT



Other partners

Vitacress, fishing clubs, Arcadian, NE



Locations

Across the seven catchments



Audiences

All people in the community



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£20,200



CCGs and volunteers are keen to have evidence and understanding about the health of their chalk streams. Many of the communities have perceptions about issues with their chalk streams and the effects on wildlife, but don't know whether these are based on fact or not and don't know how to address their concerns. There is also the issue that all of the monitoring data tends to be held by large regulatory organisations. Local people don't know how to access this, or they feel that they don't understand it.

This project will deliver a comprehensive programme of training for our existing and new "Chalk Stream Champions" – our local volunteers who will be getting involved in the delivery of a wide range of Watercress and Winterbournes projects. Champions will also be taking a key role in the environmental monitoring of the Scheme, to assess the success of the Scheme on the health of the chalk streams.

Outputs

- 80 people are trained in identifying and removing INNS
- 6 people with skills in heritage brickwork restoration
- 60 people with increased skills in restoring and enhancing chalk stream habitats
- 20 people trained in fix-point photography
- 284 Chalk Stream Champions trained in a range of skills essential for looking after and monitoring their chalk streams and associated heritage structures
- 20 people will have the skills to deliver guided walks and talks
- 284 Chalk Stream Champions will volunteer their time by attending essential training courses for delivery

Outcomes

- Chalk streams with habitats in better condition due to reduction in INNS
- Identified chalk stream heritage structures in better condition
- Chalk stream habitats in better condition and better able to support key chalk stream species
- Chalk stream champions that are able to monitor and record the health of their own stream and will take a lead in reporting anomalies, pollution or sedimentation during the Scheme and beyond.
- Chalk stream champions that can take action to care for their chalk stream - reducing pollution and INNS and improving habitats.
- Community members will have a better understanding of the chalk stream heritage and take a lead in talks about issues / actions required



Lead

WCSRT



Other partners

HIWWT, WTT, S&TC



Locations

Across the seven catchments



Audiences

Chalk Stream Champions, CCGs



Timetable

Y1 Y2 Y3 Y4 Y5



Cost

£33,180



We know from surveys, water quality data and the catchment walkovers that riparian landowners and adjacent are affecting their local chalk streams in a number of ways. Sediment and nitrate run-off have been identified as two of the main issues which result from a range of land uses including farming / small holding, vineyards and equine keeping. In addition, many of those who have riverside properties are domestic householders and others have bought land for the fisheries interest and have little experience in managing the adjacent wetland habitats. Our Development Phase has also identified that a number of winterbournes have and are being damaged due to a lack of understanding about the nature of the winterbournes themselves.

This project will deliver an ongoing programme of training events, on-site workshop sessions and advice visits aimed at improving the management of the chalk streams, riparian land and land within the surrounding catchments where activities impact on the chalk streams.

Outputs

- 600 landowners and managers (including riparian garden owners) attend 40 events targeted at specific land use types
- Production of 5 best practice examples online and a chalk stream habitat restoration guide
- 25 targeted landowners receiving site specific advice for their land holding and a minimum of 15 implementing changes
- 4 landowners x 8 tours / demonstration visits each = 64 hours volunteer time
- £12,880 staff time contributed from the Catchment Sensitive Farming advisers to delivering land advice and training to landowners not in stewardship

Outcomes

- Landowners and land managers will know more about their heritage and how to manage it better
- Landowners and managers that know how to and choose to take action to avoid negative impacts on the chalk streams
- Land managers and owners with the skills and knowledge to manage their chalk streams and floodplain habitats
- Landowners and managers that understand better the impact of their land management actions on the chalk streams
- Improved bankside habitat for the chalk streams
- Reduced sediment and pollution in the chalk streams

 Lead HIWWT	 Other partners NE, Bombay Sapphire	 Locations Across the seven catchments	 Audiences Riparian landowners, equine owners, identified businesses	 Timetable Y1 Y2 Y3 Y4 Y5	 Cost £40,570
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5.2 Project delivery timetable

Project	2020									2021				2022				2023				2024				2025			
	Q1			Q2			Q3			Q4			Q1	Q2	Q3	Q4													
	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	Q1	Q2	Q3	Q4													
1.1 Chalk Stream Habitat Restoration																													
1.2 Natural Flood Management																													
1.3 Stopping Sediments																													
1.4 Spawning Habitats																													
1.5 Conserving our Native Crayfish																													
1.6 Vitacress Wetland Creation Scheme																													
2.1 Building Sustainable CCGs																													
2.2 W&W Grant Scheme																													
2.3 Save Every Drop																													
2.4 Septic Smart																													
2.5 Tackling Invasives																													
3.1 Education Programme																													
3.2 Roaming by the river																													
3.3 Restoring our Chalk Stream Structures																													
3.4 Tales from the Riverbank																													
3.5 Hidden Treasure Trails																													
3.6 Open Chalk Streams																													
4.1 Chalk Stream Events																													
4.2 Chalk Stream Champions																													
4.3 Chalk Stream-Friendly Land Management																													

5.3 Project changes between Round 1 and Round 2

5.3.1 Overall changes

Proposed Change	Explanation
<p>Landscape Partnership area boundary change</p>	<p>The initial boundary maps showed the catchments of the 7 tributaries (green areas) which are defined by topography and indicate all of the land which ultimately drains in to a particular stream. The floodplain areas (blue corridor) were indicative of where we envisaged the bulk of the capital expenditure around river and floodplain enhancement taking place, and were constructed by creating a 1km ‘buffer’ around the stream channels.</p> <p>At the downstream end, and at points where the river channel runs close to the edge of a catchment (such as in the Candover) this buffer zone protruded beyond the catchment so has been clipped so that the external boundary of the project area now exactly coincides with the hydrological catchments of the waterbodies.</p>
<p>Terminology</p>	<p>In our Stage 1 application, the term headwaters, chalk streams and rivers were all used in different contexts to refer to our 7 chalk streams, all of which are headwaters to the Rivers Test and Itchen.</p> <p>During our Development Phase consultation we have realised that this terminology is confusing for the local communities, many of whom don’t know what a headwater is. In order to avoid confusion and enable engagement with the project, we have chosen to use the term chalk stream throughout the Scheme now and will continue to do this in all publicity and promotional material.</p>
<p>Programme and project changes</p>	<p>During the Development Phase we realised that we needed to make some changes to the names and divisions within our programmes and projects in order to make them easier to understand for those not so heavily involved in the Scheme. The names of many of the projects have been adjusted to make them more engaging and to reflect the decision to use the term “chalk stream” rather than “headwater” or “river”. Outputs and impacts from the projects have had minimal change.</p>

5.3.2 Individual project changes

Proposed Change from Stage 1	Explanation
Vitacress Wetland Creation Scheme	This project has grown significantly in scale and scope during its detailed design phase and it now a £450,000+ scheme, more than double its original cost. This hugely exciting and unique wetland creation scheme will act as an exemplar for the salad and watercress industry. It is being funded entirely by Vitacress – so the main costs are not shown within Watercress and Winterbournes budgets. Watercress and Winterbournes will fund the dissemination and promotion of the scheme to other growers and wider industries.
Watercress and Winterbournes Grant Scheme	In the Stage 1 application the grant scheme included an open grant scheme to a wide range of applicants. In Stage 2 and following consultation and discussion with partners and stakeholders, we are proposing to divide the grant scheme into an open grant scheme for community groups / organisations and a targeted capital grant scheme for landowner improvements, only open to applicants who have received land advice with recommendations for capital improvements which can't be funded through stewardship or other grant schemes.
Save Every Drop	This project has grown from our initial and quite outline water efficiency and consumer council proposals in our Stage 1 application. The project has been developed in conjunction with our behaviour change consultant and Southern Water and uses the learnings from the community challenge pilot which Southern Water ran in Cheriton during the Development Phase and from wider water efficiency schemes. The scheme will test the effectiveness of combining the chalk stream environmental message delivered by the Landscape Partnership with household water efficiency audits. The environmentally friendly cleaning products element within the Stage 1 application has been removed as regulatory improvements in the last two years, means that the phosphate levels in all products have improved.
Chalk Stream-Friendly Land Management	In our Stage 1 application the landowner advice focused primarily on agriculture and large estate management. The need for this has decreased during the period of the Development Phase as the Catchment Sensitive Farming (CSF) Officers have been busy within the area and cluster farms have started to develop. Both are making headway in tackling some of the run-off and sedimentation issues. In order to avoid duplication and complement this ongoing work, the partnership are agreed that the Land Management advice and training within Watercress and Winterbournes should target those landowners that are not being reached and engaged through either CSF or stewardship. These have been identified as: equine holdings, farms and estate owners not in stewardship, areas not in pesticide priority areas so not covered by CSF advice and vineyards.

Proposed Changes from Stage 1	Explanation
Lake Restoration	This project had grown in scale and scope from Stage 1 and was going to focus on taking two large lakes (Grange Lakes) offline. Taking these lakes off-line (separating them from the stream) will have a significant positive impact on the health of the Candover and further downstream, the Itchen. The size, risk and level of costs for this project are the main reason for taking this project out of the Scheme. This project will still go ahead, and will still have the support of Watercress and Winterbournes volunteers, but outside of the Scheme.
Getting Hooked	In our Stage 1 proposals, this was a fly-fishing focussed project aimed at getting young people involved in the sport. Following Stage 1 feedback from NLHF, this project has no longer been taken forward as an individual project. However, the heritage of fly-fishing has now been included within <i>3.1 Education Programme</i> project aimed at schools and young people and also within <i>4.1 Chalk Stream Events</i> project which is aimed at the wider community, so the heritage elements have all been retained.
Head to the Headwaters	This project has now been split into two – project <i>3.2 Roaming by the River</i> which includes the community-identified access improvements and interpretation requirements and a new project, <i>3.5 Hidden Treasure Trails</i> , which incorporates the digital species trail for young people and families as well as specialist interest trails and volunteer-led guided walks.
Literary Connections	This project has now been incorporated into the wider <i>3.4 Tales from the Riverbank</i> project– a new project which focuses on a different aspect of chalk stream inspiration over three years – photography in year 2, literature in year 3 and telling local stories in year 4.
River Keeper Training	This project has now been amalgamated into the wider training programme delivered within <i>4.3 Chalk Stream-Friendly Land Management</i> project. This wider training programme delivers training opportunities focused on a wide range of targeted audiences.



5.4 Watercress and Winterbournes Risk Register

The Watercress and Winterbournes Landscape Partnership Risk Register identifies potential risks or issues and the actions to be taken to mitigate or manage them. This register will be updated (where necessary) with each quarterly claim and will be a routine agenda item for Board meetings, enabling the Board to track risk management and note any omissions or additional actions that should be added.

Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
Key partners withdraw from the partnership	M	H	<ul style="list-style-type: none"> We may miss crucial skills and knowledge within the LP makeup Strategic projects may not be delivered Joined up strategic thinking not present Funding gap if financial support also withdrawn 	<ul style="list-style-type: none"> Ensure that the LCAP and Partnership Agreement gain commitment from all partners and that commitment has been gained at the highest levels of the organisation. Ensure broad representation of all partners on the Partnership Board, ensuring the LP benefits from a strong and diverse membership with a range of skills. Loss of individual partners might not affect the delivery of the Scheme as a whole if another suitable body or individual can deliver the same work. Partnerships Manager to maintain good relationships, commitment and communications between partners. Contingency funding plans in place in the event of a funding gap within the Scheme. Identifying and attracting additional sources of funding will however continue to be a task for the Partnership Manager during the course of delivery. 	Partnership Manager Chair or Board
Changes in staff within partner organisations	M	M	<ul style="list-style-type: none"> Less commitment from partner organisation in question and involvement in the delivery of the Scheme Less understanding about the ethos of the Scheme and thus less buy-in about what it is trying to achieve 	<ul style="list-style-type: none"> Ensure buy-in within partner organisations through a range of staff and levels. Ensure new members of staff are given a good induction into the Scheme, what it aims to achieve and clarity about what their role in the partnership is. 	Partnership Manager

Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
One or more key Scheme / project staff move on or take maternity or long term sick leave before the Scheme / project is completed.	M	H	<ul style="list-style-type: none"> Additional recruitment and gap in employment likely to delay activities 	<ul style="list-style-type: none"> Test motivation and suitability thoroughly within recruitment. Manage staff effectively. Ensure that there is an agreed procedure for immediate staff recruitment and that that this is put into place straight away. Ensure that notice periods are appropriate to the importance of the role and that they allow where possible, an adequate handover period between the staff members. Ensure good communication within the Scheme staff team and a crossover of skills and knowledge between roles so that staff members are more easily able to pick up areas of other work temporarily. 	Partnership Manager LP Board HIWWT HR Manager
Problems recruiting and retaining staff with the right level of knowledge and experience	M	H	<ul style="list-style-type: none"> Could cause delays in programme and decrease in quality of delivered projects 	<ul style="list-style-type: none"> Ensure roles are given competitive salaries and benefits to be able to attract good quality, experienced staff. Ensure that all recruitment procedures and paperwork are scrutinised by the Board, in order to recruit relevant skilled staff. Ensure rigorous approach to recruitment including tests and second interviews if appropriate. Ensure experience is directly relevant to role. Ensure that staff are well supported to develop new skills where it is deemed necessary. 	LP Board HIWWT HR Manager
Delivery costs exceed final costs agreed at Stage 2	M	H	<ul style="list-style-type: none"> May not be able to deliver all agreed outcomes and outputs 	<ul style="list-style-type: none"> Ensure thorough costing and budgeting during the Development Phase. Ensure sufficient contingency and inflation built in to the Scheme. Notify LP Board of any potential problems as early as possible so that they can be involved in finding solutions. 	Programme Manager LP Board

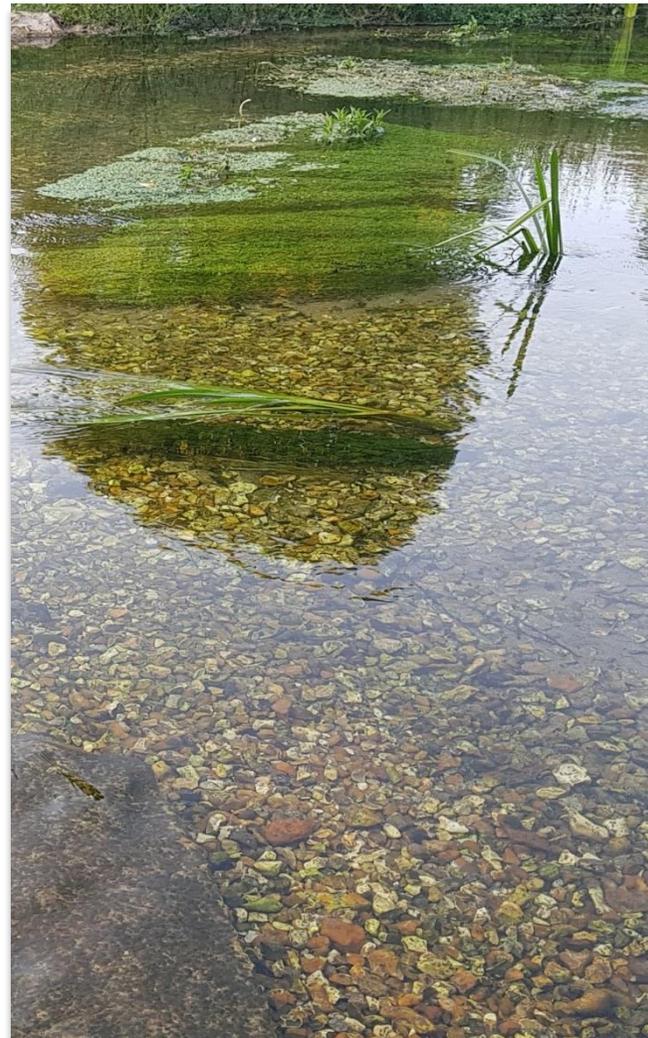
Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
Failure to reach match funding targets / receive all pledged match funding	M	H	<ul style="list-style-type: none"> Can't deliver all projects / budget cuts would have to be made 	<ul style="list-style-type: none"> Partners to sign up to funding contributions before the Stage 2 application is submitted and a timetable for providing these. Encourage partners to look for alternative sources of funding. Notify Programme Manager and LP Board of any problems in good time, so that all partners can be involved in agreeing the solution. 	Partnership Manager LP Board
Project delivery partners have cash flow problems as payments are only made quarterly	M	H	<ul style="list-style-type: none"> Project partners have cash flow issues so are unable to continue to deliver projects 	<ul style="list-style-type: none"> Ensure all delivery partners fully aware of the timing, process and risks associated with the funding arrangements. Project delivery partners to work through cash flow scenarios before submission to ensure that sufficient funds are available. Consider early payments for small organisations that are having problems. 	W&W staff team Project delivery partners HIWWT
Project partners do not hand in quarterly reports in a timely way with the correct information	M	M	<ul style="list-style-type: none"> Partnership Manager not able to submit the progress report and claim to NLHF in a timely manner 	<ul style="list-style-type: none"> Provide a clear schedule for project delivery partners. Quarterly reminders for project delivery partners. 	W&W staff team
Procurement rules are not followed	L	H	<ul style="list-style-type: none"> NLHF will not pay out the grant if the correct procedures have not been followed. 	<ul style="list-style-type: none"> Partners will commit to NLHF terms within their partnership agreement. Partners will be given a copy of procurement rules which we will clarify at the beginning of the Scheme so that everyone is clear about what this means. Board partners will be reminded regularly about the need to adhere to the procurement rules. 	Partnership Manager W&W staff team Delivery partners

Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
Unwillingness of landowners to engage with the Scheme	M	H	<ul style="list-style-type: none"> Projects cannot happen at planned locations 	<ul style="list-style-type: none"> Year 1 projects to have landowner agreements in place by the time application is submitted at the end October 2019. Many landowners already engaged. One major landowner on the Partnership Board. Landowners to be approached by the partner with the best existing relationship. Communications from year 1 projects to highlight benefits of projects so that other landowners clearly see benefits of being involved. 	Delivery partners Development Phase Project Manager Partnerships Manager
Scheme does not deliver long term sustainable benefits for the landscape, its heritage and its communities	L	H	<ul style="list-style-type: none"> Unable to create a lasting legacy for the management of the Watercress and Winterbournes headwaters 	<ul style="list-style-type: none"> During the Delivery Phase, create a robust Legacy Plan that is a shared vision and shows ownership and commitment from the whole partnership and communities. Talk about legacy and long-term commitment in the Development Phase and throughout the Delivery Phase with both partners and with Community Catchment Groups. Develop skills in landowners, managers, farmers, professionals, Community Catchment Groups and volunteers so that they have the skills required to ensure the future stewardship of the headwaters. Support the development of the Community Catchment Groups into robust long-lasting groups, building necessary skills and group set-up to support this and create a momentum within the communities that wants to recognise and maintain the area's headwater heritage. Build ongoing management and maintenance requirements into all projects. Work with partners in the Test and Itchen Catchment Partnership to ensure that they will be the partnership that will take on overseeing the long-term benefits of the Scheme beyond the end of the funded works. 	LP Board Test and Itchen Catchment Partnership Partnership Manager W and W staff team

Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
Agri-environment schemes and what they can offer is affected by an exit from Europe.	M	H	<ul style="list-style-type: none"> May create uncertainty about what can be included within future schemes and what the land management requirements might be into the future 	<ul style="list-style-type: none"> Involve NE staff in discussions about long-term management plans with landowners to ensure joined up approach. 	<p>LP Board</p> <p>Partnership Manager</p>
Loss of connectivity between projects within the Scheme	L	M	Failure to secure a chief outcome, that of “the whole being greater than the sum of the parts”	<ul style="list-style-type: none"> The numerous links between different projects means that the strong connectivity will be maintained even if specific projects don’t succeed. Regular board meetings at different venues, project visits, communications and individual project responsibility will work to identify any potential failings before they become an issue. 	Partnership Manager
Climate change may threaten the heritage that the Scheme has worked to protect.	M	M	We will require a proactive and flexible response to ensure heritage and investment is safeguarded.	<ul style="list-style-type: none"> The increased integrity and connectivity through the Scheme will create a landscape which is more resilient to changes in climate, new diseases etc. The stronger relationships between the partners will ensure a quicker more joined up approach should emergencies such as flood and drought become more frequent. Climate changes may have an impact on monitoring results for the Scheme though which will need to be taken into account during the evaluation of the Scheme. 	All partners
<p><u>Projects</u></p> <p>1.1 Habitat Restoration</p> <p>Adjacent landowners uncooperative due to lack of communication</p>	M	M	<ul style="list-style-type: none"> Projects cannot happen at planned locations Lack of community buy-in to the Scheme 	<ul style="list-style-type: none"> Many adjacent landowners already engaged through CCG groups or previous communications. Adjacent landowners to be approached by the partner with the best existing relationship. Communications from year 1 projects to highlight benefits of projects so that adjacent landowners can understand the potential influences to their land. Adjacent landowners will be kept fully ‘in the loop’ with project action, timescales and any changes. 	<p>W&W Staff Team</p> <p>Delivery partners</p>

Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
1.3 Stopping Sediments Lack of long-term maintenance in place for interventions	L	H	<ul style="list-style-type: none"> Changes in land management are not addressed with practical intervention leading to recurring problems 	<ul style="list-style-type: none"> 1.3 Stopping Sediments improvements will happen in parallel to 4.3 Chalk Stream-Friendly Land Management to ensure that land management is addressed. Involve NE staff in discussions about long-term management plans with landowners to ensure joined up approach. Build ongoing management and maintenance requirements into all projects. Landowner agreements will be in place for any site at which improvements are made, assuring maintenance is agreed upon for ten years after the project. 	Projects and Conservation Officer Delivery Partners
1.6 Vitacress Wetland Creation Scheme Scheme gets held up by a planning appeal	M	M	<ul style="list-style-type: none"> The Scheme would take much longer to deliver due to the timescale for an appeal process. 	<ul style="list-style-type: none"> Expenditure for the capital implementation of the wetland creation project has been kept outside of the Scheme budgets as it is being funded fully by Vitacress. The LP Scheme is including costs for the promotion and dissemination of details and learnings about the project but these could be redirected to support other projects if necessary. This means that if for any reason the Scheme gets delayed or cannot go ahead, then the overall budgets for the Scheme are not affected. Partners will show support for the Scheme through the planning process LP staff will work to ensure that the communities around Vitacress have a full understanding of the proposed Scheme. If the full outputs and outcomes of the Scheme could not be achieved we would work with Vitacress to implement some of the smaller elements that don't require planning permission. 	Vitacress LP Board

Risk or issue	How likely is the event?	How serious would the event be?	Consequence	Action you will take to help to prevent the risk	Who is responsible for dealing with the risk?
2.1 Building Sustainable CCGs Groups don't form sustainably in a way that will result in long-lasting involvement – a key legacy for the Scheme	M	H	<ul style="list-style-type: none"> Groups will not stay together beyond the end of the Scheme Communities will not take long-term leading role in caring for their chalk streams 	<ul style="list-style-type: none"> Set clear understanding and expectations from the start Provide training and build confidence in running meetings, governance of group, etc. Nurture clear leaders Ensure succession, mix of age-groups 	Community Catchment Officer
2.2 Grant Scheme Grant scheme is under-subscribed	L	M	<ul style="list-style-type: none"> We won't achieve the impacts for the chalk streams and communities that we want to through this project 	<ul style="list-style-type: none"> Ensure good promotional plan for the scheme and keep up continued promotion whilst the grant scheme is still open. Ensure promotion is targeted to a wide range of the W and W population Actively follow up early projects identified during the Development Phase 	Communications and Events Officer and Partnership Manager
2.3 Save Every Drop Household water efficiency audits are undersubscribed	M	M	<ul style="list-style-type: none"> We will not achieve the household water efficiency targets that we are aiming for 	<ul style="list-style-type: none"> Ensure strong promotional plan is in place and implemented Ensure there is strong buy in through the CCGs and that they are heavily involved in promoting the scheme to other community members. Use leading CCG member household audits as video examples 	Communications and Events Officer / Community Catchment Officer



Section 6: Finances and outputs



6.1 Introduction

This section outlines the Scheme Budgets and Scheme Outputs in greater detail, building on the work that was outlined in Section 4.

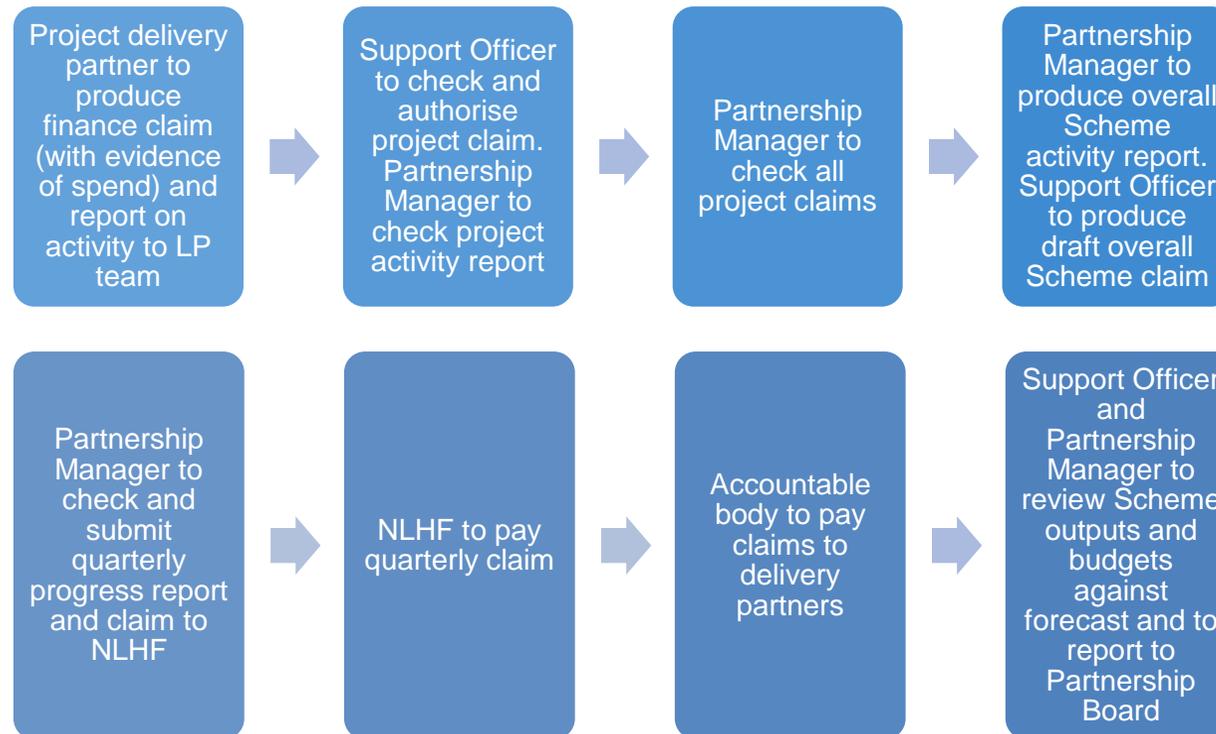
For a more detailed breakdown Part 2 of the LCAP includes the full project proformas which include background information, work programmes timetables, detailed budgets and outputs for each project.

6.2 Financial management and processes

Hampshire & Isle of Wight Wildlife Trust (HIWWT) will be the Accountable Body for the Scheme.

Where HIWWT is the project lead for an activity, the Trust's procurement procedure will be used. Where another organisation is the project lead they will use their own procurement procedures as long as this is within NLHF procurement parameters. All delivery partners will be required to confirm their understanding of the NLHF procurement parameters and the financial procedures required at the start of the Scheme.

Quarterly claims procedure



6.3 Assumptions in the budget

- Inflation has been applied individually for each item within the budget using either the appropriate Consumer Price Indices or Construction Price Indices for 2019. Inflation has not been applied to activities with set prices or that are being carried out by the in-house team or by volunteers.
- Contingency has been calculated based on a risk assessment of each individual activity. The following contingency amounts have been applied to the three risk levels:



6.4 Scheme delivery costs

The tables below summarise the projects that make up the Scheme, who are lead partners and the individual project costs:

Project	Lead Partner	Budget
Programme 1 – Resilient Chalk Streams		
1.1 Chalk Stream Habitat Restoration	Wessex Chalk Stream & Rivers Trust / Wild Trout Trust	£238,531
1.2 Natural Flood Management	Hampshire County Council / Wessex Chalk Stream & Rivers Trust	£40,975
1.3 Stopping Sediments	Wessex Chalk Stream & Rivers Trust	£87,888
1.4 Spawning Habitats	Wessex Chalk Stream & Rivers Trust	£60,936
1.5 Conserving Our Native Crayfish	Hampshire & Isle of Wight Wildlife Trust	£82,240
1.6 Vitacress Wetland Creation Scheme	Vitacress	£6,000
	Total Programme Budget:	£516,570

Project	Lead Partner	Budget
Programme 2 – Chalk Stream Community Action		
2.1 Building Sustainable Community Catchment Groups	Hampshire & Isle of Wight Wildlife Trust	£18,193
2.2 Watercress and Winterbournes Grant Scheme	Hampshire & Isle of Wight Wildlife Trust	£110,810
2.3 Save Every Drop – Community Water Efficiency	Southern Water and Hampshire & Isle of Wight Wildlife Trust	£410,290
2.4 Septic Smart	Hampshire & Isle of Wight Wildlife Trust	£11,530
2.5 Tackling Invasives	Environment Agency and Hampshire & Isle of Wight Wildlife Trust	£60,166
	Total Programme Budget:	£610,989

Project	Lead Partner	Budget
Programme 3 – Exploring and Celebrating our Chalk Stream Heritage		
3.1 W&W Education Programme	Wessex Chalk Stream & Rivers Trust	£27,000
3.2 Roaming by the River	Hampshire & Isle of Wight Wildlife Trust	£46,492
3.3 Restoring our Chalk Stream Structures	Hampshire & Isle of Wight Wildlife Trust	£48,312
3.4 Tales from the Riverbank	Hampshire & Isle of Wight Wildlife Trust	£25,260
3.5 Hidden Treasure Trails	Hampshire & Isle of Wight Wildlife Trust	£51,070
3.6 Open Chalk Streams	Hampshire & Isle of Wight Wildlife Trust	£30,810
Total Programme Budget:		£228,944

Project	Lead Partner	Budget
Programme 4 – Chalk Stream Skills		
4.1 Chalk Stream Events	Hampshire & Isle of Wight Wildlife Trust	£20,200
4.2 Chalk Stream Champions	Wessex Chalk Stream & Rivers Trust	£33,180
4.3 Chalk Stream-Friendly Land Management	Hampshire & Isle of Wight Wildlife Trust	£40,570
Total Programme Budget:		£93,950

Project	Lead Partner	Budget
Scheme Delivery and Core Scheme Costs		
Recruitments Costs	Hampshire & Isle of Wight Wildlife Trust / Wessex Chalk Stream & Rivers Trust	£5,000
Partnership Manager - FT for 4 years 9 months	Hampshire & Isle of Wight Wildlife Trust	£229,765
Projects and Conservation Officer - FT for 4 years 9 months	Wessex Chalk Stream & Rivers Trust	£158,936
Community Catchment Officer - FT for 5 years	Hampshire & Isle of Wight Wildlife Trust	£165,480
Community Education Officer - 3 days/week for 4 years 9 months	Wessex Chalk Stream & Rivers Trust	£95,361
Support Officer – 3 days / week for 4 years 9 months	Hampshire & Isle of Wight Wildlife Trust	£82,070
Communications & Events Officer - FT for 4 years 9 months	Hampshire & Isle of Wight Wildlife Trust	£159,109
Redundancy costs at Scheme end	Hampshire & Isle of Wight Wildlife Trust	£19,410
Scheme vehicle and travel for all Scheme staff	Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust	£37,000
Training for Project Staff	Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust	£15,000
Equipment for all Scheme staff - laptops, office equipment, software, GPS, mobiles, PPE / uniforms, shared contact management system	Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust	£33,880
Full Cost Recovery	Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust	£255,901
Local office space rental costs	Hampshire & Isle of Wight Wildlife Trust and Wessex Chalk Stream & Rivers Trust	£24,650
Scheme generic promotion and communications	Hampshire & Isle of Wight Wildlife Trust	£14,960
Monitoring – Invertebrate, water quality and key species	Hampshire & Isle of Wight Wildlife Trust	£182,470
Monitoring and evaluation – mid term and final	Hampshire & Isle of Wight Wildlife Trust	£23,232
Monitoring and evaluation – 5 years post Scheme	Hampshire & Isle of Wight Wildlife Trust	£8,500
Volunteers – travel and expenses	Hampshire & Isle of Wight Wildlife Trust	£18,775
Inflation	Hampshire & Isle of Wight Wildlife Trust	£34,076
Contingency	Hampshire & Isle of Wight Wildlife Trust	£101,433
	Total Budget:	£1,665,008

TOTAL SCHEME BUDGET: £3,115,461

6.5 Scheme income

Source	Cash Amount	Non Cash amount	Volunteer time	NLHF category	Status
Hampshire & Isle of Wight Wildlife Trust	£18,609			Own Reserves	Secured
Wessex Chalk Stream & Rivers Trust	£15,000			Private Donation – Trusts / Charities / Foundations	Secured
Environment Agency	£60,000			Other public sector	A priority but subject to final budget approval for 2020-21 and 2021-22
Hampshire County Council	£10,000			Local Authority	Secured
Hampshire County Council – access grant scheme	£5,000			Local Authority	Need to apply for once Scheme is running
Southern Water	£260,000			Commercial / Business	Secured
South Downs National Park Authority	£9,000			Local Authority	Secured
Test and Itchen Association	£5,000			Private Donation – Trusts / Charities / Foundations	Secured
St Mary Bourne Parish Council	£14,000			Local Authority	Secured
Laverstoke and Freefolk Parish Council	£250			Local Authority	Secured
Laverstoke and Freefolk Millennium Green Trust	£250			Private Donation – Trusts / Charities / Foundations	Secured
Parish and town councils	£5,000			Local Authority	Will be applying to their grant schemes
Landowner contributions – grant scheme and restoration projects	£11,142			Private Donation - Individuals	Will be secured primarily through the grant scheme as match funding
Community group contributions	£5,000			Private Donation – Trusts / Charities / Individuals	Will be secured through the grant scheme as match funding
5 year monitoring post Scheme	£8,500			Increased management and maintenance costs	Will be secured during the period of the Scheme
Fundraising	£34,493			Other fundraising	Will be secured during the period of the Scheme
Hampshire County Council – natural flood management event costs		£2,075		Non cash contribution	Secured
Hampshire County Council – provision of kissing gates		£2,792		Non cash contribution	Secured
Southern Water – water efficiency visits and installation of water efficiency equipment		£389,700		Non cash contribution	Secured
Salmon and Trout Conservation UK – invertebrate sampling training and equipment		£4,500		Non cash contribution	Secured
Wild Trout Trust – 8 days habitat restoration work		£2,080		Non cash contribution	Secured
Community group and landowner contributions through Grant Scheme applications		£10,000		Non cash contribution	Will be secured through the grant scheme as match funding
Volunteer time for whole Scheme			£305,270	Volunteer time	Will be secured during the Scheme
Totals:	£461,244	£411,147	£305,270		

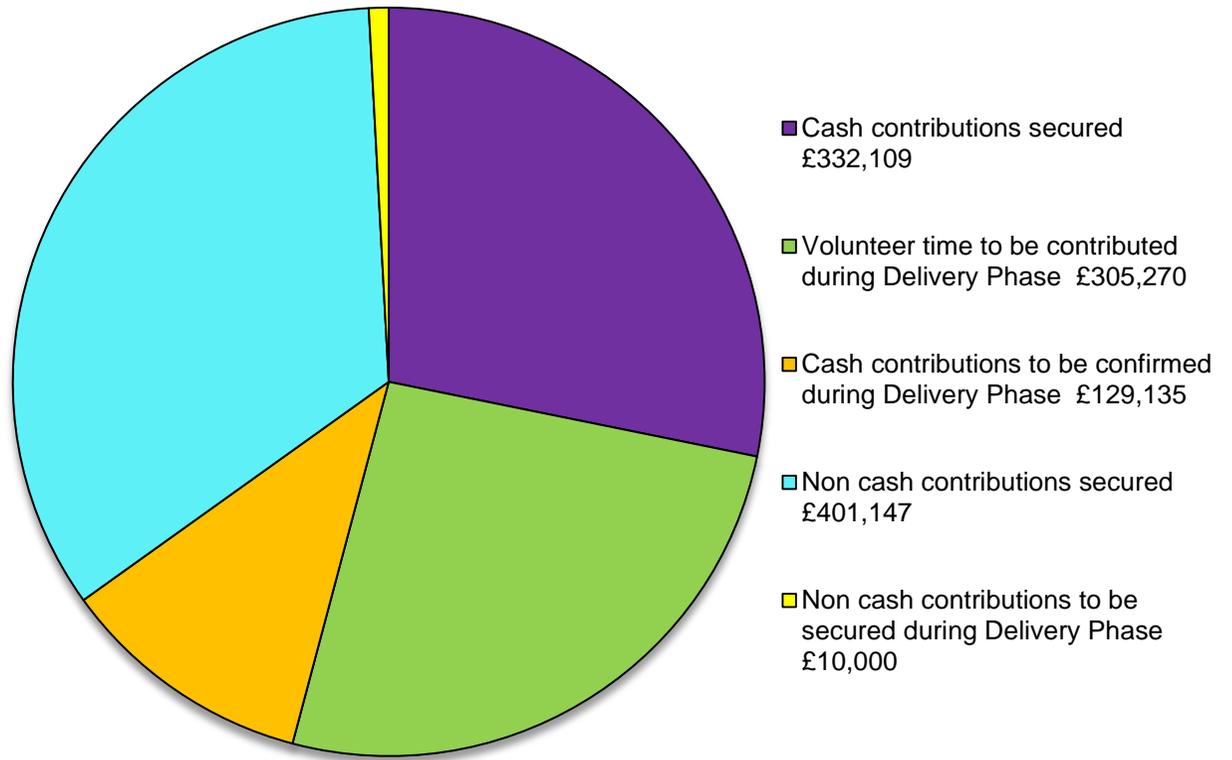


Figure 14 Income summary for the Watercress and Winterbournes Scheme

6.6 Added value

As well as the match funding detailed in the table previously, Watercress and Winterbournes is benefitting from some specific support and complementary activities which do not fall under the match-funding heading. These include:

The construction of the Vitacress Wetland Creation Scheme is being funded wholly by Vitacress Salads Ltd. The whole project is likely to cost in excess of £500,000 and will be delivered during the Delivery Phase of the Scheme, achieving significant outputs in relation to the reduction of fine sediment and phosphates entering the Bourne Rivulet. This is a significant investment for Vitacress to improve their factory outputs, even though their standards are already well above the regulatory standards. The costs for constructing the wetlands has not been included within the Watercress and Winterbournes Scheme although there are costs included for the wide dissemination and promotion of the results of this exemplar project.

Grange Lakes is a large capital project to offline a lakes complex from the Candover Brook. The project was included within the Scheme during the Development Phase but was removed before submission of the Stage 2 application due to the status of the project by the Stage 2 deadline. Partners felt that including the project would have resulted in unacceptable risks for the Scheme. This is disappointing but the Environment Agency supported by the Partnership are still planning to progress the Grange Lakes project outside of the Scheme. This will mean that our local volunteers can still be involved in this project - giving them some unique volunteer experience (the creation of new stretch of chalk stream) that wouldn't be possible through any of the other projects.

Natural England will be supporting project *4.3 Chalk Stream-Friendly Land Management* by focusing some of their existing Catchment Sensitive Farming staff time on delivering land management advice to identified land owners within the Watercress and Winterbournes area, even if they are not within a stewardship agreement. They will also be providing staff input into the delivery of Chalk Stream-Friendly training courses and specific winterbourne specialist input where required.



6.7 Summary of budget changes between Round 1 and Round 2

6.7.1 Financial changes

Proposed Change	Explanation
Financial Changes:	<p>The overall Landscape Partnership Scheme has grown in size from £2,769,954 to £3,115,461</p> <p>This is mainly down to small increases across a number of projects but significant increases have also occurred in the following areas:</p> <p>Staffing costs – the staffing costs for the Scheme have increased due to the increase of the Communications and Events Officer from part-time to full-time. The partnership feels that this is a necessary increase due to the number of engagement and training events proposed to be delivered by the Scheme.</p> <p>Match funding – the increase in costs overall has resulted in an increased requirement for match funding. Much of this is being provided by Southern Water, who are highly engaged in the Scheme. Some of our original Stage 1 match funders such as Natural England and Hampshire County Council have had to reduce their contributions due to budget restrictions, but are still very engaged in the Scheme and are providing non cash contributions where they can instead.</p>

6.7.2 Cost breakdown

The tables below show how the current costs compare with those identified at the first round application stage. The overall grant asked for from the NLHF has remained the same at £1,937,800:

Capital Cost Headings	Round 1	Round 2	Difference	Explanation
Purchase price of items or property	£0	£0	£0	N/A
Repair and conservation work	£641,400	£485,967	-£155,433	Decrease largely due to the removal of the Grange Lakes project (Round 1 – Online lakes project) as it was considered too high a risk to take forward as part of the Scheme at the stage it was at by the end of the Development Phase
New building work	£0	£0	£0	N/A
Other capital work	£0	£22,250	+£22,250	Increase is due to the insertion of some small interpretation projects and heritage plaque proposals all of which were identified as needed through the community consultation
Digital outputs	£0	£21,040	+£21,040	Specific digital outputs were identified during the Development Phase as project ideas were developed further. The key digital outputs will be: <ul style="list-style-type: none"> • Species Trails using QR codes (project 3.5 Hidden Treasure Trails) - the game / activity was included in R1 but wasn't put under the digital outputs heading as we were unsure of the nature of it at that point. • An interactive map for the website which will show all of the Scheme activities and events for members of the public wanting to get involved • Increased use of video online as a way of engaging people
Equipment and materials (capital)	£69,000	£65,680	-£3320	This change is largely due to a change in category coding – as we have moved the access improvement works to the Repair and Conservation budget to better reflect the work that will be done.
Other costs (capital)	£0	£12,800	+£12,800	This covers some streamside seating identified by the local communities and capital installations by landowners supported through the Grant Scheme – both worked up in more detail during the Development Phase.
Professional fees (capital)	£0	£0	£0	N/A
Total	£710,400	£607,737	-£102,663	Overall a decrease in capital budget, largely due to the removal of the Grange Lakes online lake project.

Activity Cost Headings	Round 1	Round 2	Difference	Explanation
New staff costs	£771,365	£910,131	+£138,766	Increased partly costs due to an increase in the hours of the Communications and Events Officer from part-time to full-time reflecting the increased focus on people engagement events and communications in two of the new projects. We have also slightly increased the salary costs of the Officer roles to increase competitiveness within the market on advice from NLHF.
Training for staff	£12,000	£15,000	+£3,000	Small increase in costs due to increase in Comms role from part-time to full-time (see above) and to reflect small increases in training costs during the period since round 1.
Paid training placements	£0	£0	£0	N/A
Training for volunteers	£72,900	£29,783	-£43,117	Volunteer training costs have decreased in cost due to a number of reasons: <ul style="list-style-type: none"> • some of the initial water quality and invertebrate training has been carried out during the Development Phase, • some of the training is less expensive than expected and • more of the training is to be carried out by either core staff or partner organisations at no cost
Travel for staff	£27,000	£37,000	+£10,000	Travel costs now include costs for a Scheme van to allow for transport of tools and materials as more of the smaller restoration works will be carried out by core and partner staff rather than contractors so that volunteers can be involved in more of the projects.
Travel and expenses for volunteers	£12,738	£18,775	+£6,037	A small increase to the volunteer budget to reflect the experiences and feedback from our Development Phase volunteers and the experience of our people-engagement Secrets of the Solent project.
Equipment and materials (activity)	£47,750	£37,536	-£10,214	Small reduction in budget due to: <ul style="list-style-type: none"> • Removal of angling equipment – no longer needed as focus has shifted to the heritage of fly-fishing rather than the fishing itself • New regulations reducing phosphates in household products were introduced during the Development Phase, this along with our survey findings showing lower phosphate levels meant that the household consumer council proposed in Round 1 was no longer necessary.
Other costs (activity)	£181,150	£137,650	-£43,500	Reduction in budget due to: <ul style="list-style-type: none"> • removal of angling taster sessions – no longer needed as focus has shifted to learning about the fly-fishing heritage, • reduction in budget for Vitacress scheme - much of the promotion will be done through digital and other methods, equally as effective but at no cost, • removal of cluster farm proposal as these are already now developing in the area
Professional fees (activity)	£27,000	£36,920	+£9,920	Small increase in budget due to the need to employ specialist expertise to deliver some of our targeted training and land management visits e.g.. for equine establishments
Total	£1,151,903	£1,222,795	+£70,892	Overall, a small increase based on a better understanding of what needs to be delivered and some changes in project delivery to better target identified issues.

Other Cost Headings	Round 1	Round 2	Difference	Explanation
Recruitment	£4,500	£5,000	+£500	Negligible increase due to increasing costs.
Publicity and promotion	£27,800	£66,340	+£38,540	Significant budget increase for engagement activities that will attract a wider audience e.g.. through the Tales of the Riverbank photo competition, literary competition and stories project. Also identified a need for increased budget for publicity and promotion for the Open Chalk Streams project and the behaviour change focused projects.
Evaluation	£23,000	£38,732	+£15,732	The increase in evaluation costs from Round 1 to Round 2 reflects the change from Riverfly monitoring to the more advanced Smart Rivers invertebrate monitoring which will result in an increased understanding of the specific issues in each chalk stream and the impacts that the Scheme's work is having on these. This will enable our Scheme evaluation to be much more focused in terms of what worked and what did not.
Other costs	£29,650	£58,530	+£28,880	Equipment costs for the Scheme staff has increased for a number of reasons: <ul style="list-style-type: none"> GDPR means that in order to share landowner and volunteer data we will need to provide a new contact management system that can be accessed by key delivery partners. This will also help with providing volunteer monitoring data for the Scheme. At Round 1 we had intentions of recycling some of the older IT and other equipment available at HIWWT. However over the last year we have realised that this old IT equipment is no longer fit for purpose so we have had to include costs to purchase new.
Full Cost Recovery	£210,781	£255,901	+£45,120	The Full Cost Recovery budget has risen due to the increase in the Comms Officer role from part-time to full time and due to the increase in full cost recovery annual costs since the Round 1 submission.
Contingency	£123,997	£101,433	-£22,564	In Round 1 the contingency costs were based on a standard 8% on top of all capital and activity costs. In Round 2 the contingency costs have been worked more appropriately based on a risk assessment of each individual activity.
Inflation	£27,703	£34,076	+£6373	In Round 1 the inflation costs were based on a standard 1.5% inflationary budget on top of all capital and activity costs. In Round 2 inflation costs have been applied individually for each item either using appropriate Consumer Price Indices or Construction Price Indices for 2019. Activities carried out by the in-house team or by volunteers have not been included.
Increased management and maintenance costs	£0	£8,500	+£8,500	Management and maintenance costs have been included to cover the cost of a 5 year monitoring programme beyond the end of the Scheme so that we can start to see the long-term effects of the investment.

Other Cost Headings	Round 1	Round 2	Difference	Explanation
Non-cash contributions	£21,000	£411,147	+£390,147	The non cash contributions have increased significantly. This is due to: <ul style="list-style-type: none"> Large non cash contributions from Southern Water who will be providing household water efficiency audits and fitting free water saving equipment within the W&W area. An increase in non-cash contributions from partners who want to support the Scheme but are lacking in cash resources at the present time.
Volunteer time	£439,220	£305,270	-£133,950	The volunteer time contribution has decreased considerably as we have reduced the amount of ongoing water quality monitoring proposed from our Round 1 proposals. Experience during the Development Phase has shown that a reduced level of water quality monitoring will provide us with the level of knowledge that we require.
Total	£907,651	£1,284,929	+£377,278	An increase in this budget overall but for a range of reasons as set out above.

SCHEME TOTAL:

£2,769,954

£3,115,461

+£345,507

6.8 Scheme budgets

See **Appendix 8** for the following spreadsheets:

- Scheme expenditure and income summaries

6.9 Scheme outputs and outcomes

Each project has identified the key outputs it will deliver, shown in the summaries and full project plans in Section 4 and in the full project proformas in Part 2 of the LCAP.

Annual reviews of project activity will be undertaken by the responsible LP staff and any underperformance will be addressed initially by the Partnership Manager and ultimately the Partnership Board

The Scheme outputs and outcomes are listed in table 2 below and these are also referenced in our Evaluation Framework at **Appendix 9**.



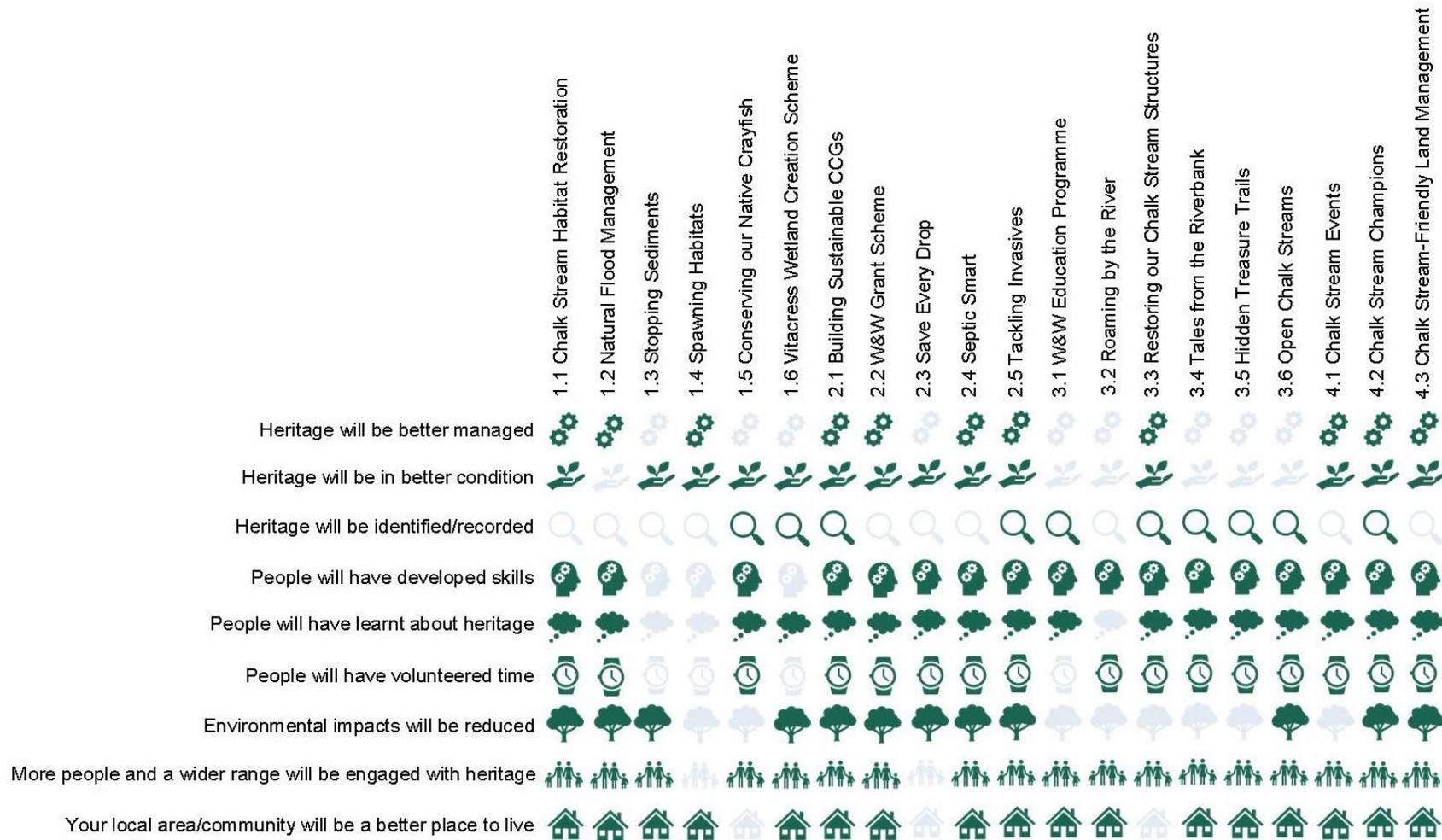


Figure 15 How each project will contribute to the delivery of Scheme outcomes for heritage, people and communities

The table below shows the anticipated outputs, NLHF outcomes and planned project outcomes from the Scheme project by project:

Planned project outputs	Planned project outcomes
Programme 1: Resilient Chalk Streams	
1.1 Chalk Stream Habitat Restoration	
<ul style="list-style-type: none"> • 21 management plans will be produced in partnership with land owners / managers to agree management of sites • 2.5km of chalk stream and 0.2 square kilometres of floodplain habitat will be improved through restoration or enhancement • 42 volunteers will receive upskilling and knowledge about the best-practice management of river and floodplain habitats, plus obtaining practical restoration skills • 2490 hours (312 days) of volunteer time spent on habitat restoration / enhancement projects • 200 people will be reached each year through the Duck Feeding in Andover awareness campaign. 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Priority species (water vole, crayfish and salmonoids) and habitats will be in better ecological status within restored or enhanced sites post completion (measured by CSM protocol surveys) <p>Outcomes for people</p> <ul style="list-style-type: none"> • 42 well-trained volunteers across the catchment area, will facilitate continued management of river and floodplain habitats post 2025 • An increased perception of ‘engagement and ownership’ with the chalk stream habitats amongst engaged volunteers (measured by feedback survey) <p>Outcomes for communities</p> <ul style="list-style-type: none"> • The improvement of impacted natural heritage environments will result in a direct increase in amenity value for local communities – many of which already value these environments highly • People will learn about the issues of feeding ducks bread and will know about other options.
1.2 Natural Flood Management (NFM)	
<ul style="list-style-type: none"> • Actions taken to reduce risk of flooding in 4 villages and 1 hamlet • 2 NFM guidance notes produced to support CCG activity • 40 key stakeholders and 80 community members with increased knowledge of NFM • 100m of chalk stream habitat better managed for flooding in St Mary Bourne. • 2500 square metres of land better managed in Cheriton for water storage and for decreasing flows. • 14 volunteers involved in delivering NFM measures or monitoring work totalling 78 volunteer days. 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Prevention of degradation of chalk stream habitat • Land managed more sustainably • Headwaters are managed sensitively to protect ecology and better manage flood risk <p>Outcomes for people</p> <ul style="list-style-type: none"> • People have the skills needed to balance flood and environmental protection • Communities and key stakeholders better understand NFM and the role of land management measures in reducing flooding <p>Outcomes for communities</p> <ul style="list-style-type: none"> • People, property and infrastructure are better protected from flooding

Planned project outputs	Planned project outcomes
1.3 Stopping Sediments	
<ul style="list-style-type: none"> 14 sites at which mitigation measures are installed, achieving 7km of river enhanced Water turbidity readings upstream to downstream of 14 delivery sites will be decreased by >50% (on average) post works 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> Fine sediment and nutrient input reduced, resulting in healthier chalk streams <p>Outcomes for communities</p> <ul style="list-style-type: none"> Greater connection of people with their local environment / natural heritage
1.4 Spawning Habitats	
<ul style="list-style-type: none"> 5 kilometres of chalk stream (including high quality spawning habitat) will be made accessible to a variety of fish species. 5 management plans will be produced in partnership with landowners / managers to agree management of sites where significant fish passage has been improved. 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> At the 5 structures altered by the project for the benefit of fish passage, surveys of fish communities will reveal a beneficial change in composition of upstream community. <p>Outcomes for communities</p> <ul style="list-style-type: none"> The improvement of impacted natural heritage environments (barriers to fish passage) will result in a direct increase in amenity value for local communities (visibility of fish and wild fishing opportunity) – many of which already value these environments highly.
1.5 Conserving our Native Crayfish	
<ul style="list-style-type: none"> Establishment of a local crayfish hatchery and brood stock of 100 individuals Extend the upstream limit of distribution of white-clawed crayfish by 100m and 400m on the Candover and Cheriton Streams respectively 250 students learning more about native crayfish through teaching and research programmes 168 volunteer hours from students assisting in husbandry 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> Increase the robustness and the likely long-term survival of white-clawed crayfish within the Candover and Cheriton chalk streams <p>Outcomes for people</p> <ul style="list-style-type: none"> Increase of the knowledge of Sparsholt College students with regards to the ecology and conservation of white-clawed crayfish. Increase of the knowledge of public within and beyond the catchment communities with regards to the ecology and conservation of white-clawed crayfish resulting in greater appreciation <p>Outcomes for communities</p> <ul style="list-style-type: none"> In addition to opportunities to learn about the species, there will be some opportunities to directly engage with live animals, which is rare due to their protected status and the fact they live underwater and are largely nocturnal

Planned project outputs	Planned project outcomes
1.6 The Vitacress Wetland Creation Scheme	
<ul style="list-style-type: none"> • 14,167m² of new wetland habitat • Suspended solids decreased from c4mg/l to c2mg/l in the Bourne Rivulet • Phosphate levels decreased from annual average of c0.07mg/l to c0.04mg/l • 5 events focused on watercress heritage and the way watercress production has changed over time • 125 people attend events to learn more about their local heritage 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Improved water quality of effluent from watercress farm and salad processing • Reduction in nutrient and sediment content of effluent compared to influent • Fewer pollutants entering the Bourne Rivulet <p>Outcomes for people</p> <ul style="list-style-type: none"> • People know more about the watercress industry and its heritage within the area <p>Outcomes for communities</p> <ul style="list-style-type: none"> • People more engaged with one of the key heritage industries within their area • Increased understanding of how commercial watercress farming and salad washing addresses and monitors environmental impacts – less local conflict
Programme 2: Chalk Stream Community Action	
2.1 Building sustainable CCGs	
<ul style="list-style-type: none"> • 80 CCG members will receive training; and will be upskilled having better access to information • 120 CCG members and volunteers attending the Forum events and sharing news and progress. • 80 people involved in volunteering their time to deliver the Community Catchment Plans 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • People will appreciate chalk stream heritage and will have the confidence to encourage others to manage it better • The chalk streams will be improved and in a healthier condition (assessed via ongoing monitoring by CCGs) • With greater awareness, local people will be able to recognise and record heritage features. <p>Outcomes for people</p> <ul style="list-style-type: none"> • Local people will receive training. Local people will have increased levels of confidence. • Chalk stream Champions will take on an active role in caring for and championing their chalk stream, representing their community at events, sharing their skills and knowledge and promoting the Scheme.

Planned project outputs	Planned project outcomes
2.2 Watercress and Winterbournes Grant Scheme	
<ul style="list-style-type: none"> • Minimum of 10 projects / 10 landowners improving land management through the grant scheme • Five community projects supported by the grant scheme focussed on restoring and caring for built and natural chalk stream heritage • 25 people actively involved in leading activities to care for or celebrate their chalk stream heritage • 150 people learning about heritage – and celebrating the unique qualities of the chalk stream heritage through a range of activities • Range of volunteering activities from recording, monitoring, organising, stewarding, practical conservation etc. • More people involved in learning about / delivering heritage activity • Greater volume of activities and events focused on the heritage of the catchment 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Reduced poaching of watercourses and therefore reduced sediment getting into the chalk streams • Reduced pesticides reaching the watercourses • Restoration of chalk stream heritage for future generations <p>Outcomes for people</p> <ul style="list-style-type: none"> • Local people empowered to lead activities to care for or celebrate their chalk stream heritage • People will make changes in their lifestyles to help look after their local chalk stream • More people inspired to contribute to the management and celebration of their local chalk stream <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Increased sense of place and community • Measurable improvement in quality of local environment • Improved skills and knowledge within the local communities on river / catchment wide heritage issues
2.3 Save Every Drop community water efficiency project	
<ul style="list-style-type: none"> • 3382 households will receive water efficiency visits • 15% less water used by participating households • 1000 people attending local water saving events • 14 x Community Catchment Group members will be upskilled with increased understanding of the connection between water use and the health of the chalk stream • 20 x Community Catchment Group members will be involved in running events • 100 volunteer hours assisting with water saving events • 40,000 people reached with communications about water efficiency / health of the chalk stream messaging 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Lessons learnt for the efficient and effective delivery of community water-saving projects can be used for scale-up and replication <p>Outcomes for people</p> <ul style="list-style-type: none"> • Reduction in water use in households involved through people adopting and maintain water saving behaviours • People are more aware of how their own water usage can impact on their chalk stream health • Water Efficiency Champions will share their knowledge with other community members and encourage behaviour change within the community

Planned project outputs	Planned project outcomes
2.4 Septic Smart	
<ul style="list-style-type: none"> • 20 local community members trained as Septic Smart champions with increased knowledge in septic tank issues • Engagement with 3,800 residents and 10 businesses with septic tanks • 10 septic tank suppliers and local maintenance companies engaged and educated • 7,000 leaflets circulated to current residents and businesses with septic tanks • 2,000 leaflets disseminated to new residents with septic tanks in 'new home' packs • 1 septic tank management video produced 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Improved management of septic tanks resulting in lower nitrate levels in the streams in priority areas <p>Outcomes for people</p> <ul style="list-style-type: none"> • Chalk Stream Champions gain valuable experience and opportunities to apply their skills • Increased understanding among local people about environmental responsibilities related to septic tank use <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Residents improve their septic tank management, leading to lower nitrate levels in the chalk streams • Information about the environmental impacts and legal responsibilities related to septic tank use will be available to a greater number and variety of people.
2.5 Tackling Invasives	
<ul style="list-style-type: none"> • 46 km of bank cleared of INNS • 21 mink rafts in place • 21 volunteers trained in INNS identification and are more confident about removing some INNS • 21 volunteers are more confident identifying mink activity • 200 people attend the roadshow and / or training events • 504 volunteer hours monitoring INNS (including mink) • 378 volunteer hours removing INNS • 70 volunteers involved in managing and supporting the awareness raising roadshow 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Riparian habitats cleared of INNS, with volunteers playing an active role in on-going management • Mink numbers are reduced, with volunteers playing an active role in mink monitoring, protecting species such as water vole and fish • Records of INNS are mapped and kept up to date. <p>Outcomes for people</p> <ul style="list-style-type: none"> • Volunteers are more confident and competent about the management of their local environment, and know who to contact regarding species outside of their experience • People avoid purchase of INNS and know what action to take to reduce / remove INNS they find <p>Outcomes for communities</p> <ul style="list-style-type: none"> • People, supported by CCGs, make active choices to support their natural heritage through species selection and biosecurity measures

Planned project outputs	Planned project outcomes
Programme 3: Exploring and Celebrating our Chalk Stream Heritage	
3.1 Watercress and Winterbournes Education Programme	
<ul style="list-style-type: none"> • At least 7 schools or colleges will engage with the project each year • At least 7 schools and 2 youth or uniformed groups will engage with the project each year • 3750 young people will have learnt more about their local heritage during education sessions • 8 training courses delivered for teachers and youth leaders 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Young people are more aware of how their actions can impact on the health of their chalk stream. <p>Outcomes for people</p> <ul style="list-style-type: none"> • Young people will be able to tell others why chalk streams are so special and why we should care about them • Teachers and group leaders will feel confident about identifying chalk stream species and will be better able to incorporate local chalk stream heritage into their activities with young people • Young people will have a deeper understanding of how chalk streams have influenced settlements over time, and of the wildlife present in them.
3.2 Roaming by the River	
<ul style="list-style-type: none"> • 8 stiles replaced with kissing gates • 1 bridge repaired • 5 benches installed • 70 hours of volunteer time spent making access improvements • 2 stretches of river having path improvements 	<p>Outcomes for people</p> <ul style="list-style-type: none"> • Local communities take a leading role in developing improved access in their area • Volunteers will gain skills in improving physical access to the chalk streams. <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Less-abled community members and parents with pushchairs will be able to access the chalk stream more easily • Communities in close proximity to the streams have a better appreciation for their environment as they can now enjoy access to areas they were previously unable to.

Planned project outputs	Planned project outcomes
3.3 Restoring our Chalk Stream Structures	
<ul style="list-style-type: none"> • 8 significant chalk stream structures restored and safeguarded from further deterioration • 10 newly recorded water meadow systems registered on the Heritage Environment Record • 20 volunteers will be recruited and trained in brick structure restoration skills • 750 volunteer hours contributed • 500+ people will know more about their chalk stream heritage 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Restored water meadow structures managed in a way that will minimise any future deterioration • Water meadow and other chalk stream structures repaired and preserved for future generations • Up to date records of the water meadows systems available to the public. <p>Outcomes for people</p> <ul style="list-style-type: none"> • Volunteers will have key new skills that they will be able to apply to a wider range of heritage structures both during and beyond the project • Landowners have greater knowledge of the significant heritage on their land • Volunteers will have gained a greater awareness of the importance of the landscape and heritage. <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Greater awareness in local people that the chalk streams have played a vital part in our land management and food heritage.
3.4 Tales from the Riverbank	
<ul style="list-style-type: none"> • 200 people enter the photography competition • 150 young people enter the literature competition • 50 people share their chalk stream stories and associated photographs / maps / items • 50 Chalk Stream Champions assist with project activities • 450 people attend the photography exhibition • 100 people attend the literature festival • 1 literary celebration video produced • 1 chalk stream stories video produced • 10 Chalk Stream Champions collect chalk stream stories • 450 people attend the stories exhibition • 1 photography exhibition held in 3 locations • 1 literature competition and 3 literatures festival events held • 1 chalk stream stories exhibition held in 2 locations 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Richness of the chalk stream and central role that chalk streams play in local lives better recorded. <p>Outcomes for people</p> <ul style="list-style-type: none"> • Chalk Stream Champions gain valuable experience and opportunities to apply their skills • Increased understanding of the rich cultural heritage of the chalk streams; encouragement to care for and engage with them creatively • Increased understanding of the central role that the chalk streams play in local lives; encouragement to make own chalk stream stories. <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Greater connection of people with their local environment / natural heritage and greater sense of ownership of their local area • Local communities working together to deliver heritage projects, building community spirit • People, including young people will be inspired by their chalk stream heritage • Improved sense of place and community involvement, enhanced cultural offer for local people and visitors.

Planned project outputs	Planned project outcomes
3.5 Hidden Treasure Trails	
<ul style="list-style-type: none"> • 8 wildlife trails established • 35 heritage features recognised with plaques • 96 guided walks delivered • 20 Chalk Stream Champions deliver guided walks • 30 young people participate in wildlife trail focus groups • 450 people use the wildlife trails • 300 people use the heritage trails • 800 people attend guided walks 	<p>Outcomes for people</p> <ul style="list-style-type: none"> • Volunteers will have gained a greater awareness of the importance of the landscape and heritage and a greater awareness of the species that live in their chalk stream. <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Greater connection of people, including young people, with their local environment / natural heritage • Greater sense of ownership of their local area.
3.6 Open Chalk Streams	
<ul style="list-style-type: none"> • 51 riverside sites opened for visits • 1,050 + people who take the opportunity to visit the chalk stream sites. • 3 heritage features special to each site identified • 7 landowners will have learnt more about their own heritage features • 21 people will have supported events, either by volunteering to open their chalk stream, or helping a neighbour • 1 annual event programme created • 7 Parish magazines and 2 newspapers featuring the Scheme and gardens 	<p>Outcomes for people</p> <ul style="list-style-type: none"> • People will appreciate riparian management and be inspired for potential careers or volunteering opportunities. • People will have enjoyed spending time with nature around chalk streams and be better engaged with their local heritage • People will have enjoyed volunteering. <p>Outcomes for communities</p> <ul style="list-style-type: none"> • An increased number of people will have enjoyed visiting the normally hidden stream and heritage • There will be an increase in the diversity of visitors (e.g. age and ethnicity) • Wider community groups will have enjoyed spending time connecting with nature and learning more about chalk streams • A greater sense of place is created for the communities involved.

Planned project outputs	Planned project outcomes
Programme 4: Chalk Stream Skills	
4.1 Chalk Stream Events	
<ul style="list-style-type: none"> • 80 events held attended by 1500 people • 4 events targeted at specifically at winterbourne landowners and managers • 15 volunteers share their specialist knowledge and skills with others • 120 volunteer hours 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Winterbournes are better managed and in better condition because of better understanding <p>Outcomes for people</p> <ul style="list-style-type: none"> • Local people are inspired by their chalk stream heritage • More people will have volunteered time • Local people are empowered to share their knowledge and skills <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Communities in the W and W area know more about their local heritage • A wider range of people, including young people, will have engaged with their local heritage • Good community cohesion and community involvement
4.2 Chalk Stream Champions	
<ul style="list-style-type: none"> • 80 people trained in identifying and removing INNS • 6 people with skills in heritage brickwork restoration • 60 people with increased skills in restoring and enhancing chalk stream habitats • 20 people trained in fixed point photography recording • 284 Chalk Stream Champions trained in a range of skills essential for looking after and monitoring their chalk streams and associated heritage structures • 20 people will have the skills to deliver inspiring guided walks and talks in order to pass their knowledge and enthusiasm on to others • 284 Chalk Stream Champions will volunteer their time by attending essential training courses for delivery • 4 targeted areas (off mains drainage) with trained Septic Smart Chalk Stream Champions 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Chalk Streams with habitats in better condition due to the reduction in INNS • Identified chalk stream heritage structures in better condition • Chalk stream habitats in better condition and better able to support key chalk stream species • Restoration schemes that are better recorded, before and after works <p>Outcomes for people</p> <ul style="list-style-type: none"> • Chalk Stream Champions have the skills to restore heritage brick structures during the Scheme and beyond. • Community members will have a better understanding of the chalk stream heritage and will take a lead in decision-making and action. • Chalk Stream Champions will take a lead role in monitoring and caring for their chalk stream and will pass on their skills, knowledge and enthusiasm to other community members • Local people will understand and care for their chalk stream species <p>Outcomes for communities</p> <ul style="list-style-type: none"> • Local people will work together to look after their area – improved community cohesion and ownership over their natural heritage

Planned project outputs	Planned project outcomes
4.3 Chalk-stream Friendly Land Management	
<ul style="list-style-type: none"> • 600 landowners and managers (including riparian garden owners) attending 40 events targeted at specific land use types • Production of 5 best practice examples online and chalk stream habitat restoration guide • 25 targeted landowners receiving site specific advice for their landholding and a minimum of 15 implementing changes • 4 landowners x 8 tours / demonstration visits = 64 hours volunteer time 	<p>Outcomes for heritage</p> <ul style="list-style-type: none"> • Landowners and land managers will know more about their heritage and how to manage it better • Landowners and managers that know how to and choose to take action to avoid negative impacts on the chalk streams • Reduced sediment and pollution in the chalk streams • Improved bankside habitat for the chalk streams <p>Outcomes for people</p> <ul style="list-style-type: none"> • Landowners and managers that understand better the impact of their land management actions on the chalk streams • Land managers and owners with the skills and knowledge to manage their chalk streams and floodplain habitats



Photo credit: Maggie Shelton





Section 7: Communications Plan

7.1 Role of communications

Effective communications will be central to the success of Watercress and Winterbournes. They will play a vital role in engaging both internal and external audiences, and in raising the profile of the Scheme and its partners. As the co-ordinating partner, Hampshire & Isle of Wight Wildlife Trust (HIWWT) will be responsible for ensuring consistency of messaging and tone.

All activities within the Scheme will contribute to communications activity. The communications referred to in this section are intended to represent the Scheme as a whole, contextualising individual areas of activity and unifying them in a coherent narrative. The delivery of some projects involves additional communications activities; these are outlined in the respective proformas.

Scheme communications will be regular and targeted where possible to specific demographics or interests. They will feature a variety of content and utilise a range of methods in order to engage the most diverse audience possible, with the aim of fostering ongoing interaction with the Scheme.

Evaluating success

Scheme communications will aim for continual improvement, with monitoring and evaluation of success being conducted wherever possible. This will include tracking of:

Website visits
and
engagement

Social media
reach and
engagement

E-newsletter
opens and
engagement

QR code
engagement

Press
coverage

Publications
circulation

Communications audiences:



7.2 Key audience: partners

Primary objectives

Fostering partner
engagement,
involvement, and
interaction

Improving the
quality, diversity,
and reach of
Scheme
communications

Building **strong**
relationships
between the
partners and other
Scheme
stakeholders

- 1** HIWWT will coordinate an internal communications group comprised of a representative from each partner, engaging them in strategy development and information sharing.
- 2** HIWWT will create communications guidance and resources for the partners, such as design assets and advice on media relations, to support them in contributing to Scheme communications.
- 3** HIWWT will produce internal e-newsletters to update the partners on Scheme activities and circulate requests for help and advice between the partners and other Scheme stakeholders.





Key audience: Community Catchment Groups

Primary objectives

Encouraging **CCG support for the Scheme** and advocacy of its aims and values

Ensuring **strong links** between the CCG-led projects and wider Scheme activities

Contributing **knowledge and resources** that will contribute to long-term CCG independence

1 The partners will engage directly with the CCGs at their meetings, providing opportunities to comment on Scheme communications and running focus groups to shape future content.

2 The partners will encourage CCG members to contribute content about CCG-led projects to Scheme communications and act as a conduit for disseminating messages to their communities.

3 The partners will produce communications guidance and resources for the CCGs, such as poster templates and social media advice, to increase their skills for the future.

Key audience: Chalk Stream Champions

Primary objectives

Encouraging participation in Scheme activities and advocacy of its aims and values

Enabling volunteers to **share their experiences** in their own words

Building **skills and confidence** that will contribute to long-term volunteer independence

- 1** The partners will produce volunteer e-newsletters and social media groups to disseminate upcoming opportunities, build a sense of community, and encourage sharing of ideas and resources
- 2** The partners will amplify volunteer voices by providing opportunities to participate in Scheme communications, including guest blogs and social media takeovers.
- 3** The partners will provide bespoke training in communications techniques, including presentation skills, social media use, and multimedia content creation, to increase their skills for the future.





Key audience: riparian owners

Primary objectives

Encouraging participation in Scheme activities either directly or independently

Presenting opportunities and motivation to **lead by example** and embody environmental best practice

Fostering a sense of individual efforts being a valuable part of **wider community action**

1 The partners will invite riparian owners to dedicated training sessions using engaging communications on channels such as social media, e-newsletters, and partner websites.

2 The partners will produce case studies of local riparian owners, following their progress as they make improvements to their land or adopt positive behaviours with support from staff and volunteers.

3 The partners will create communications situating the efforts of riparian owners within their wider context, and encouraging them to collaborate with others in their area to maximise their impact.

Key audience: local communities

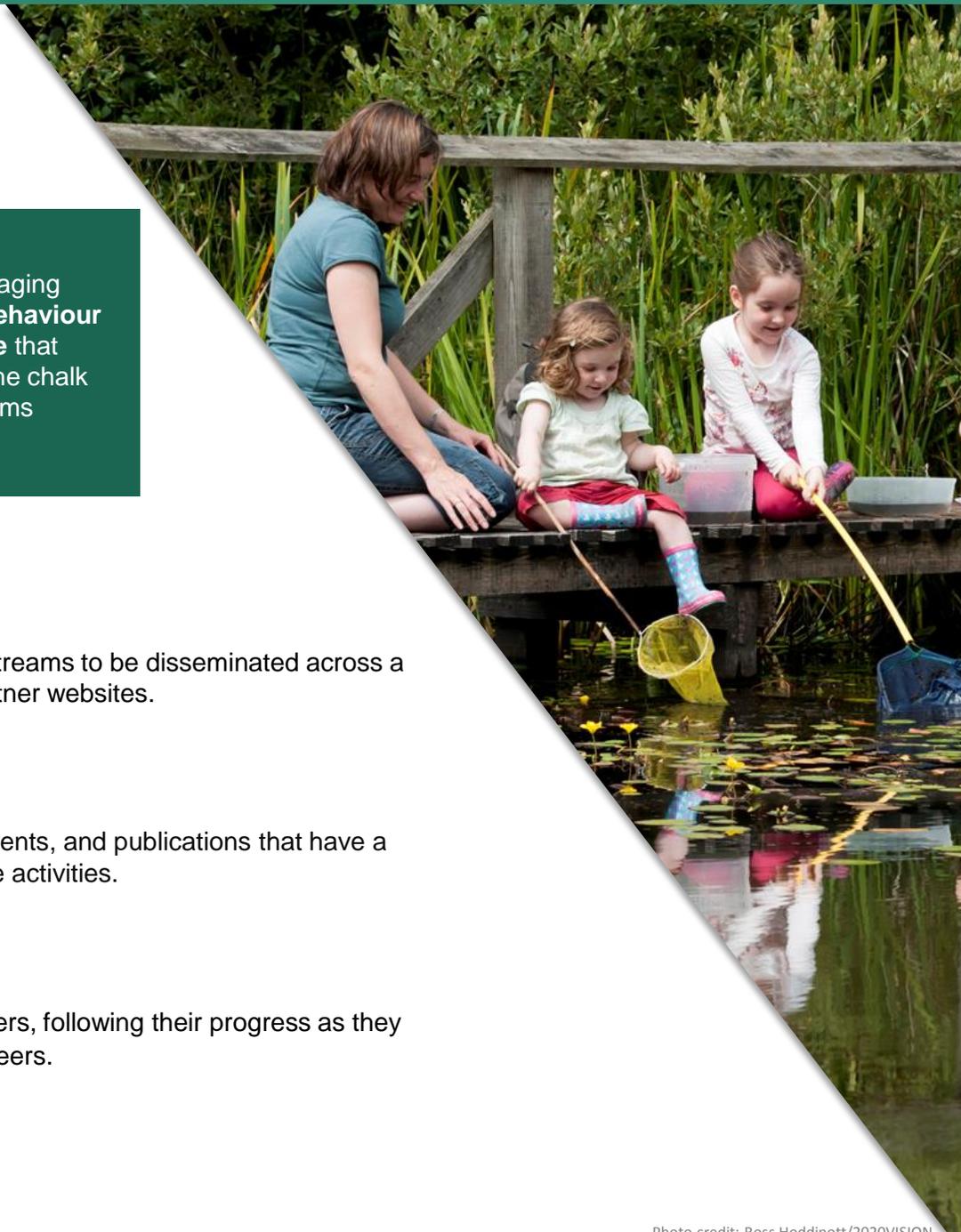
Primary objectives

Raising awareness and understanding around the chalk streams, their wildlife, and their heritage

Building a sense of pride, responsibility, and community around the chalk streams

Encouraging positive behaviour change that benefits the chalk streams

- 1** The partners will create engaging communications on the chalk streams to be disseminated across a range of channels, including social media, e-newsletters, and partner websites.
- 2** The partners will supply tailored content to community venues, events, and publications that have a local focus and emphasise the central role of residents in Scheme activities.
- 3** The partners will produce case studies of local community members, following their progress as they make positive lifestyle changes with support from staff and volunteers.





Key audience: National Lottery players

Primary objectives

Raising awareness
about the impact of
the National Lottery
Heritage Fund

**Recognising the
contribution of**
National Lottery
players to the
Scheme and
offering thanks

**Engaging National
Lottery players in**
the Scheme through
dedicated activities

- 1** The partners will consistently acknowledge the Scheme's National Lottery Heritage Fund grant, and both staff and volunteers will emphasise its impact during public speaking opportunities.
- 2** The partners will highlight the connection between playing the National Lottery and protecting heritage by producing informal profiles of players within the Scheme's local communities.
- 3** The partners will participate in National Lottery campaigns to engage players, such as Thanks To You, with exclusive special offers and events.

7.3 Bringing audiences together: Annual Forums

The Annual Forum will be a large-scale engagement event held within the Watercress and Winterbournes area each year. It will be open to anyone involved in Scheme activities, such as riparian owners, local groups, and the Community Catchment Groups.

Each one will feature project updates from partners and volunteers, presentations on related issues by guest speakers, workshops to gather feedback and plan upcoming Scheme activities, and time for networking or further discussion.

Primary objectives

Illustrating how the different elements of the Scheme **integrate and contribute** to its wider goals

Facilitating **meaningful interactions** between a wide variety of audiences and stakeholders

Celebrating the achievements of those involved in the Scheme and **recognising their contributions**

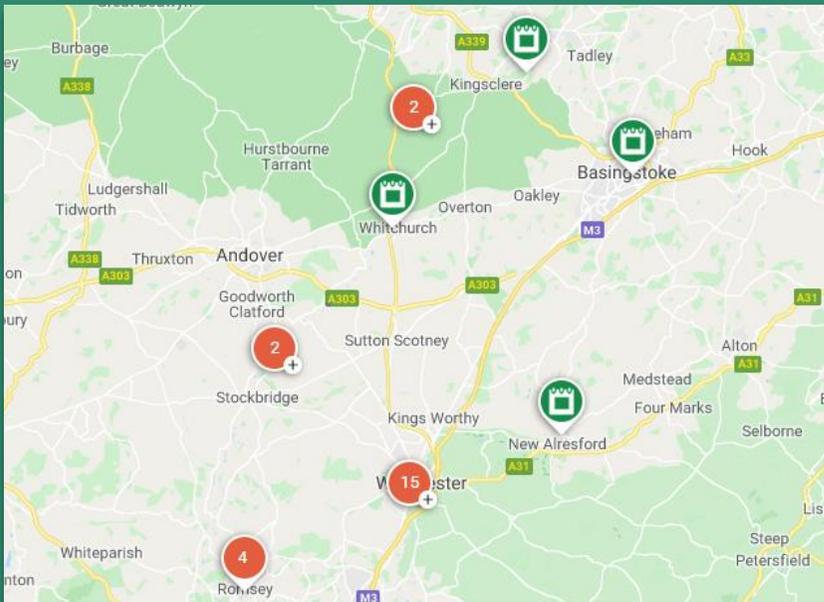
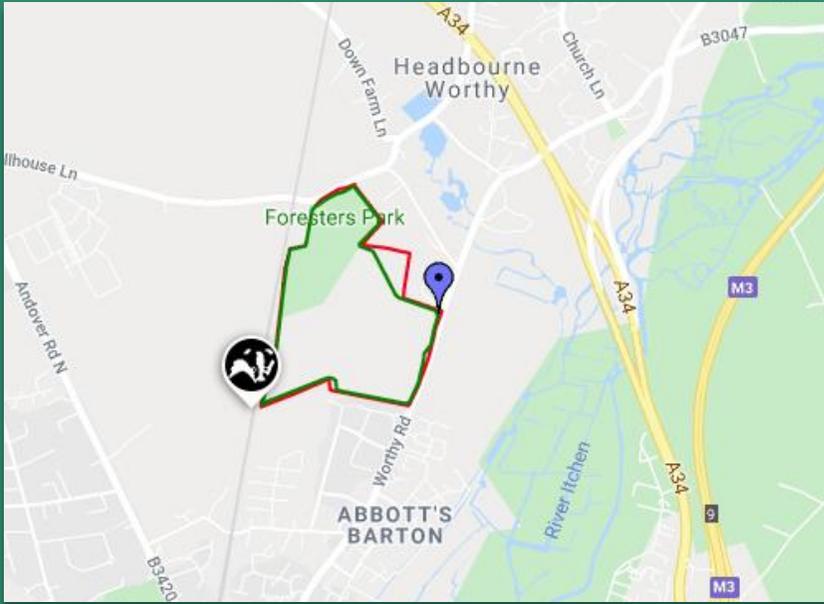
Enabling audiences to give direct feedback on the Scheme's progress and **help shape its future**



Bringing audiences together: activity maps

HIWWT will develop interactive maps on its website for the benefit of the Scheme. The maps created will be accessible to anyone visiting the website, and HIWWT will be able to update them at any time.

The maps will show activities and features across the Watercress and Winterbournes area, such as CCG-led projects and heritage structures. They will be fully integrated into the website, allowing them to link with other content such as blogs, news items, and event listings.



Primary objectives

Providing an overview of the Scheme that encourages users to **explore its activities further**

Presenting a diverse range of content in a **coherent, accessible, and intuitive way**

Highlighting the link between **Scheme activities and the landscape** in which they take place

Enabling users to **quickly and easily discover** activities and features in their local area

Bringing audiences together: Story Maps

The partners will build interactive story Maps - an innovative expansion of Esri's Arc GIS mapping system. The maps will be accessible to anyone visiting the ArcGIS website, and the partners will be able to update them at any time.

Each Story Map will showcase a project that includes significant data collection or habitat improvement activity. They will combine an interactive map with text and multimedia to form an engaging narrative around factual information.

Primary objectives

Providing the opportunity to explore certain Scheme activities in **greater depth and detail**

Presenting complex information, such as monitoring data, in an **accessible and engaging way**

Enabling volunteers involved in the featured projects to see the **impact of their efforts**

Engaging businesses and landowners who prefer a **results-based approach**

A Story Map

Pillhill Brook - Cottage on the Green River Enhancement Proposal

'Skylighting' to reduce overshadowing

Selective felling of dense riparian tree cover to allow light to reach channel. This will facilitate growth of marginal and in-stream aquatic plants.

'Skylighting' an overshadowed reach of chalkstream.

surveyPoint

Features

Proposal

Notes: Abundance of semi-mature broad leaved trees resulting in excessive riparian shading.

Feature: Overshading

Attachments: [20190625_141050.jpg](#)

Edited by Hampshireavon on 02/07/2019 at 16:08



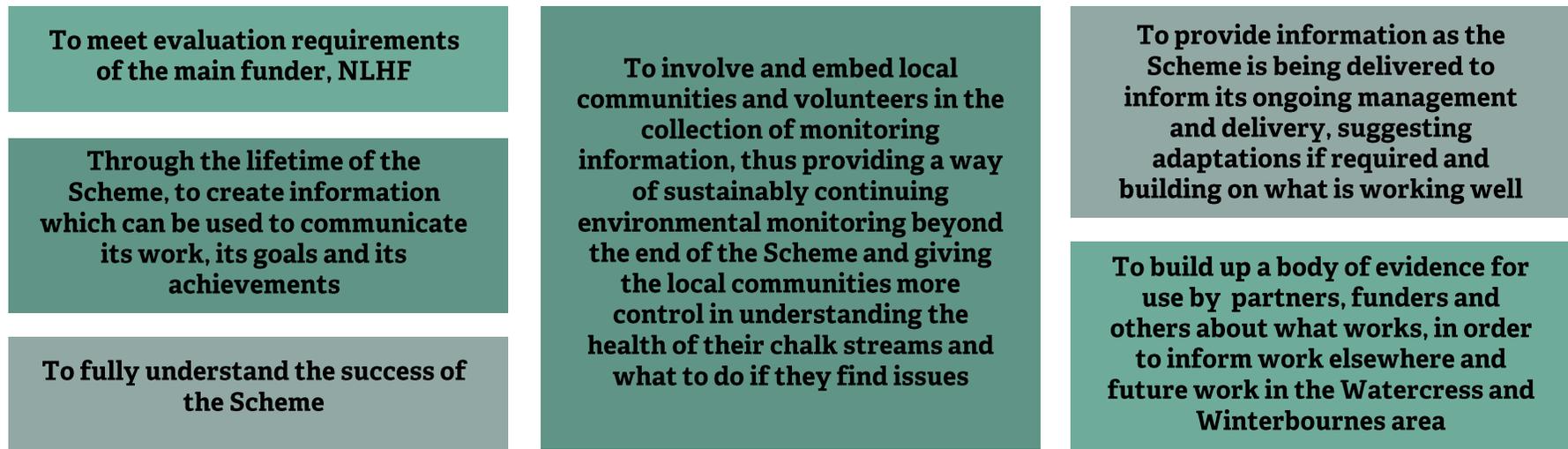
Section 8: Monitoring and Evaluation

8.1 Introduction to monitoring and evaluation

Monitoring and evaluation of the Watercress and Winterbournes is crucial to understanding the success of the Scheme and to providing a clear understanding of the legacy of the Scheme.

It also plays an important role in drawing out learning for a range of internal and external audiences, and in informing the direction of future work. These are both particularly important at a time when resources and funds are limited and during the current time of political instability and the reshaping of environmental policies.

The Watercress and Winterbournes Board's aims for the monitoring and evaluation of the Scheme are as follows:



Recognising that the monitoring and evaluation of the Scheme is an important piece of work, Resources for Change were contracted to work with the LP Board to develop ideas and produce the Monitoring and Evaluation Framework for the Watercress and Winterbournes Scheme.

Although the Board collectively have a lot of experience in environmental monitoring data, the monitoring and evaluation of the people engagement and particularly the behaviour change aspects of the Scheme are areas where we feel that professional guidance will help us to learn and achieve more.



8.2 Overview of our framework

The Monitoring and Evaluation Framework is included in **Appendix 9**.

The framework focuses on both the social/people outcomes including behaviour change and the physical environment/natural heritage outcomes. The LP Board recognise the importance of gaining a strong understanding of the benefits that the project has on people, as well as the impacts on the physical environment. Gathering meaningful data about the benefits for people and communities can be less straightforward than ecological monitoring, requiring targeted work with the different audiences/stakeholder groups, using techniques appropriate to the variety of audiences, and recognising the value of qualitative data.

The overall approach in the framework will rely on a combination of work by Scheme staff, partners, volunteers and a commissioned external evaluator. We will be embedding monitoring and evaluation activities within day-to-day working, but also including external, objective input at key points. Project staff, partners and volunteers will need support in order to fulfil their monitoring and evaluation roles effectively and to make the most of evaluation as a project management tool. For this reason, the external evaluator will have an on-going mentoring and support role, in addition to leading on two specific evaluation interventions (mid-term and final evaluations). The project staff will be responsible for on-going monitoring of activities, e.g. participant satisfaction and will work with the Partnership Manager and Board to carry out internal annual reflective reviews, while the external evaluators will design and deliver the two evaluations:

- The interim evaluation will take place at around the mid-point of Scheme delivery and will be an important review to check that the Scheme is on course to achieve its objectives and to make any identified changes to improve outcomes.
- The final evaluation will take place after five years; whilst we expect to be able to observe extensive positive changes within this time period, the full potential impacts for both the physical environment and for people are likely to take longer to be fully realised.

8.3 Behaviour Change

The monitoring and evaluation of behaviour change is especially challenging, although of immense importance for Watercress and Winterbournes. The evaluation of behaviour change aims to record what is happening before and after a project is delivered and to reveal any difference of change that takes place. From this information lessons can be developed about how to repeat a project to increase the levels of change or to scale up and replicate the project.



In the evaluation framework, we have identified 4 ‘pilot’ behaviour change projects which we will be using as case studies during the delivery phase:

- Project 1 (Partner led) – Save Every Drop water efficiency project
- Project 2 (Partner led) – Chalk Stream Friendly Land Management
- Project 3 (Community led) – Duck Feeding on the Upper Anton
- Project 4 (Community led) – Tackling Invasives

Each of these projects have specific characteristics which will allow us to test approaches to evaluating behaviour change and draw out lessons for sharing with other landscape-wide programmes. To evaluate these projects we will be using a triangulation approach to verify the data. This means that for each project we will be collecting three sources of data that in turn, verify each other. These will need to be both hard data – quantifiable data which can be clearly observed or measured and soft data – data collected directly from the people involved either by observation or by interviews / surveys. The specifics for each of these projects is included in the evaluation framework but the data collection proposals for triangulation for Project 1 – Save Every Drop are included below as an example:

PROJECT 1: Save Every Drop

The challenge for evaluating this project will be finding a way of attributing the changes to the project specifically rather than to other changes or ‘save water’ messaging that may be taking place at the same time.

Save Every Drop water efficiency project	Data source one	Data source two	Data source three
Lessons for the efficient and effective delivery of community water-saving projects that can be used for scale-up and replication	A selection of case studies	Participant survey at audit and at project end	Discussion Group with project workers and key stakeholders
People adopting and maintaining water saving behaviours	tracking household		
People are more aware of how their own water usage can impact on their chalk stream health.	during delivery		



8.4 Chalk Stream Champions lead in biodiversity monitoring

Empowering communities to take more of a leading role in caring for their chalk streams is a key element of the Watercress and Winterbournes Scheme. For this reason and because our Community Catchment Group members identified surveying and monitoring techniques as one of the key skill areas they wanted to develop, our Chalk Stream Champions will play a leading role in monitoring the water quality and biodiversity of their local streams.

This process has already begun during the Development Phase with 24 Chalk Stream Champions being trained in water quality testing and 18 being trained in Riverfly initial invertebrate testing. This allows them to monitor for severe pollution events and also the phosphate and nitrate levels within their local stream and be able to see clearly when these change for some reason. These keen early volunteers have been collecting data on their streams already, providing important baseline data whilst also increasing the knowledge and involvement of our Champions who are all keen to better understand the issues affecting their stream.

During the Delivery Phase we will be building on this knowledge by providing more advanced invertebrate (SMART Rivers) training, as well as sediment and specific species monitoring training so that the Champions can be involved in monitoring local project sites before and after works.

By giving our Chalk Stream Champions the skills and confidence during the period of the Scheme to carry out comprehensive biodiversity monitoring we can ensure that they have the tools to continue this into the future.

8.5 Key areas for evaluation

Outcomes from each of the 20 projects will be assessed against the list of key evaluation areas (broken down by project in **Appendix 9** - the evaluation framework) which will be used for the evaluation analysis. These are as follows:

Biodiversity:

- Is there improved habitat or newly created habitat?
- Are key species showing increases in numbers or range?
- Are fish spawning areas increasing?

Behaviours:

- Have people changed their behaviours in favour of those which benefit the chalk streams?
- Are people using less water?
- Are landowners managing their land more favourably?
- Are landowners maintaining their heritage features more effectively?
- Are local people avoiding planting more INNS?
- What actions have most effectively resulted in the behaviour change and how can these be replicated elsewhere?

Long-term led community action:

- Are the Community Catchment Groups robust groups with the governance, skills and cohesion to run themselves?
- Do Community Catchment Groups have a good understanding of the roles of the partners and have an outlet for regular liaison with them beyond the end of the Scheme?
- Do local people have a greater sense of ownership over their local chalk stream?

Expertise and skills:

- Have people changed their behaviours in favour of those which benefit the chalk streams?
- Are people using less water?
- Are landowners managing their land more favourably?
- Are landowners maintaining their heritage features more effectively?
- Are local people avoiding planting more INNS?
- What actions have most effectively resulted in the behaviour change and how can these be replicated elsewhere?

Changes in Water Quality:

- Is there less sediment?
- Is there less phosphate or nitrate?

Understanding and knowledge:

- What is the extent to which people have become more engaged?
- Who has become engaged?
- Have we reached the key target audiences?
- Do people know more about their chalk streams?
- Do people care more about their chalk streams?

Other key considerations that we will want to learn from the evaluation include:

What is it about the approach that works?

- What messages and activities have contributed to achieving behaviour change?
- What activities have best encouraged engagement and for what audiences?
- What elements of the Scheme's ways of working have contributed to achieving the outcomes?

Legacy:

- What are our future work priorities?
- What have we learnt that can be carried into future working relationships?
- What successful approaches from this Scheme can partners and wider organisations and policy-makers use elsewhere?
- Are changed behaviours proving short-term or long-term?
- Skills and knowledge transfer and on-going application.

Awareness and understanding:

- People connecting with their chalk stream, including young people
- People conscious of their impact on the chalk stream
- Increased awareness and understanding of the traditional riparian management practices
- Increased understanding of conservation and habitat management, including issues around non-native species

8.6 Identifying success

Watercress and Winterbournes staff and partners have considered what things would be like, if the Scheme is successful. This encompasses various dimensions – for the physical environment and heritage, for people and for the organisations involved in delivering the project – see below:

For people

- Community Catchment Groups taking a leading role in managing their chalk streams
- More Chalk Stream Champions - more people volunteering for practical habitat restoration, monitoring and people-engagement work.
- More land owners with relevant skills to carry out chalk stream-friendly land management
- More people accessing and engaged with their chalks streams and sharing their expertise and passion
- Reduced flood risk in key target areas

For the heritage

- Chalk stream habitats restored and in better condition
- Increase in key chalk stream and winterbourne species
- Fewer invasive non native species present
- Chalk streams which are resilient to future challenges such as climate change
- Water meadow and other chalk stream structures that are restored and better maintained
- Local people caring for their local chalk streams and monitoring their health

For the partner organisations

- Organisations with increased skills and capability
- More joined-up working and cemented partnership working
- Better understanding of each other's areas of work
- Future opportunities identified
- Increase in community engagement and community-led catchment work
- Increased understanding about what methods are most effective and have most impact

8.7 Reporting and dissemination

For the mid-term and final evaluations, the external evaluation consultant will be responsible for compiling a full report which will be discussed with the Partnership Board.

It will be important to close the evaluation 'feedback loop' by disseminating the learning that is drawn out. The different audiences for this mean that a variety of ways will be used in order to provide the information in a suitable format and at a level of detail that is right for each key audience. Ideas for methods include: easy read summary of evaluations; PowerPoint presentation; articles suitable for peer-reviewed journals and detailed reports for policy makers.

The evaluation will assess both quantitative and qualitative outputs based on a range of methods.

Detailed data collected from surveys of indicator species before and after restoration projects will allow partners to assess the effectiveness of projects on biodiversity and this monitoring will continue beyond the life of this Scheme. The results of this will inform future management plans and programmes of work.

Qualitative outputs are more difficult to evaluate but our monitoring work will collect data from the key audiences involved in the Scheme including CCG members, Chalks Stream Champions and landowners and will involve interviews and case studies.

Evaluation assessments will include looking at how values and perceptions have changed within the different target audiences, has the Scheme changed the behaviours and actions of these audiences, do people have a better understanding of their chalk stream heritage, are people getting more involved and is this likely to have a longer-lasting effect beyond the end of the Scheme period. Critical to the success of the Scheme will be the robustness of the Community Catchment Groups and their continuation beyond the end of the 5 year period.



Photo credit: Michael Roggo



Section 9: Legacy



9.1 The legacy of Watercress and Winterbournes

This Scheme has been developed during a time of uncertainty for the natural environment when clear policies and direction are to some extent lacking. This lack of policy direction is a risk to the Watercress and Winterbournes landscape and heritage, although the new Environment Bill does offer an opportunity to protect and enhance it in the long-term.

The Bill needs to play its part in ensuring that a clean and abundant supply of water, essential for our globally important chalk rivers, is ensured through fair and yet robust regulation. Europe has been a major force in cleaning-up our water bodies to date and now we have the opportunity to ensure that as water quantity and quality become increasingly uncertain due to climate change, the need of our rivers are put at the heart of new legislation.

In this time of policy uncertainty, community involvement is essential and can drive change and good practice as well as getting a much wider range of people involved in advocating policies that support our chalk streams. Getting communities involved and empowered beyond the end of this Scheme is a priority for the partnership and will be the most significant legacy for Watercress and Winterbournes.

9.2 Ensuring a long-term legacy

Ensuring a legacy for this Landscape Partnership is something that has been considered by the Landscape Partnership (LP) Board during the Development Phase and is critical to ensuring that all of the investment that has gone into supporting the Scheme will produce long-term change.

This chapter outlines our current thinking which will be tested and reviewed as we develop a detailed Legacy Plan from year 3 onwards following the production of our independent mid-term review.

Our approach to ensuring a long-term legacy for the Scheme will need to be multi-layered and the LP Board consider that some of the key elements of this will be:



Enabling greater community empowerment through the Community Catchment Groups

The LP Board considers the CCG groups to be key to the continuing long-term stewardship of the headwaters. During the Delivery Phase we will continue to develop their skills and knowledge of the chalk streams, their understanding of the bodies involved in governing their regulation and their ability to input into the management of the chalk streams at both a local and strategic level. Our aim by the end of the Delivery Phase will be to have robust community-led groups that will function without support from the Scheme but will continue to liaise with each other and input into and work closely with the Test and Itchen Catchment Partnership as a collective and with the individual partners within it.

The Community Catchment Group approach aligns well with HIWWT's longer-term "Wilder" strategy which will provide opportunities for continuing joint work in future. The annual Chalk Stream conference will continue to run beyond the end of the Scheme. Community Catchment Groups will play an active role in its planning and delivery and wider communities and landowners will all be involved in the event through opportunities to champion and celebrate their work, learn more about what others are doing and discuss any ongoing issues for their chalk stream.



The commitment by landowners to maintain and manage improvements on their land

Landowners will be required to sign a landowner agreement committing to the management and maintenance of any improvements to their land for 10 years beyond the end of the Scheme. Of course, by itself, this agreement will not ensure long-term changes to land management practices. This will need to be supported by the provision of a management plan for their land, training in the skills needed to implement the required land management, an increased understanding as to why it is important and how their land management plays a part in the overall resilience of the chalk stream. In addition to this, it is likely that a proportion of landowners will also require ad-hoc support from key partners. Only by providing a rounded package of support such as this will long-term change in land management be achievable.

Where land is publicly managed, Friends groups (Amport Fen Committee, Laverstoke Millennium Green Trust Committee, Friends of the Arle, Cheriton Conservation Group) will have worked with the Scheme staff to develop long-term management plans for the sites so that they can take a more active role in overseeing and managing these areas in future. Working with these groups to develop the management plans will ensure that they are workable and practical documents and that the groups have the confidence to update and continue to use these post 2025.

A tangible legacy of improved and connected habitats, improved access and interpretation

The improvements we make through this Scheme will be a long-term legacy for both the landscape and the communities. Access improvements will allow more people to visit and enjoy the chalk streams and path surfacing, seating and signs to support this will for significant timescales beyond the end of the Scheme. Improved and connected habitats backed up by management plans will be a clear legacy of the Scheme.





Strengthened relationships between partner organisations and a commitment to joined-up working

Watercress and Winterbournes has already had a positive outcome in improving communications between the partner organisations. Staff from key organisations are aware that support for landowners and communities can be disjointed, and aim to create a more cohesive and coherent process around this, including more efficient signposting to enable interested parties to contact the most relevant organisation with their enquiries.

Strategic, regulatory, local and community groups working to one purpose

There is a large and varied network of organisations, volunteers, interest and user groups, and communities involved in managing the heritage of the Watercress and Winterbournes area. After five fully-funded years of delivery, this network will have expanded and strengthened and will result in more integrated delivery at the landscape-scale, into the long-term.



An ongoing monitoring programme for the Watercress and Winterbournes streams

By training local community volunteers to carry out their own monitoring, they will be able to more easily act as guardians of their local chalk streams. Through their close connection, they will immediately spot any major issues or changes that occur and will have learnt which relevant organisation they should report to directly, or work with. They will also be better able to persuade or influence local landowners to make changes to their practices.

Behaviour change

A number of our projects aim to change behaviour in order to protect the heritage of the headwater chalk streams into the future. This behaviour change will trickle through to others in time and so provide an ongoing benefit. In addition, we will share our experiences of the most effective methods with Partners, in order for them to be effective in their future work to influence people's behaviour.



9.3 Summary of legacy outcomes

Legacy outcomes for the partnership	Legacy outcomes for heritage
<ul style="list-style-type: none">• Much closer working between local communities, the statutory bodies and NGOs.• Stronger relationships built between partners enjoying the effectiveness of joint-working that will continue after the lifespan of the Scheme.• Better liaison between partners and volunteers carrying out local monitoring will result in a more comprehensive long-term picture of the state of our chalk streams and the issues affecting them on a local scale.• Where seeking future funds, the strong partner relationships built in delivery will lead to stronger, better-designed, more holistic future projects which would have a wider potential suite of funding opportunities than many single-issue, single-partner projects.	<ul style="list-style-type: none">• Improved condition of the chalk streams and the habitats within them resulting in increased biodiversity.• Restoration and enhancement work at a catchment-scale will greatly improve the resilience of the habitats and the species that rely on them, ensuring that both common and rare species are better able to adapt and thrive in the face of climate changes and changes to land use and water policy.• Each catchment will have a Community Catchment Group and trained Chalk Stream Champions who will monitor and champion their local chalk stream heritage.• All capital works undertaken through Watercress and Winterbournes will be protected by 10 year management agreements with the beneficiaries to ensure the benefits of the NLHF investment are maintained and managed beyond the Scheme.• The impacts of people's activities on their local chalk streams will be better understood resulting in small changes to actions that will improve the condition of the chalk streams.





Photo credit: Caroline Meech

Legacy outcomes for people	Legacy outcomes for communities
<ul style="list-style-type: none"> • The Community Catchment Groups will create the opportunity for local people to take a fully inclusive role in the decision making and long-term management relating to their chalk stream heritage. • Residents, land managers and a whole generation of school children will have improved understanding and appreciation of the natural, historic and cultural heritage relating to their chalk stream. • Local people will have better access to their chalk stream through the continuation of the Open Chalk Streams annual programme and through the improved relationships that this develops between landowners and local communities. • People will have learnt skills and gained valuable experience in the management of natural heritage and will continue to learn from others and from the partnership organisations. • The riparian landowner network in the Watercress and Winterbournes area will become stronger with co-operative working and discussions becoming the norm 	<ul style="list-style-type: none"> • There will be increased community cohesiveness and collective action, through the opportunities for working together more often • Working together and sharing skills and experiences over the 5 years of the Scheme will encourage closer connections between the small, often isolated rural communities. • ‘Leaders’ will emerge from the Community Catchment Groups and will take forward future projects and schemes with new skills and increased confidence. • Through collecting a greater amount of data, and understanding what it means, communities will be empowered to monitor their chalk stream and to take action if required.

9.4 Conclusion

The Landscape Partnership sees Watercress and Winterbournes as the start of a process of increasing participation and collaboration. Local landowners, residents and agencies will work together to share, understand and appreciate the importance of the headwater chalk streams and together, will have the skills and opportunities to contribute to, and champion its future.

Key to continuing this is the sharing of a deepening knowledge of the natural and cultural heritage of the area, which will continue after the Landscape Partnership Scheme is completed. The partnership is committed to working together to encourage and support local communities in continuously developing their knowledge and skills. This will allow local communities to play a more prominent and effective role in having responsibility for the plans and decisions that will shape and protect the Watercress and Winterbournes landscape, long into the future.

Photo credit: Linda Pitkin/2020VISION

