

Taunton Waterways Strategy and Guidance

September 2024

LDĀDESIGN

Calm
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Foreword

The River Tone is the reason why Taunton is 'Taunton'. Its blue/green corridor runs through the heart of the town, combining with the Bridgwater and Taunton Canal and multiple tributaries to form a waterways network that reaches into the countryside in every direction. The Waterways interconnect the town's neighbourhoods and root communities within the history and culture of the town and its surrounding Somerset landscape, providing an understanding of place and a sense of identity and belonging.

The network of waterside footpaths links key historic and cultural sites, and one of the best ways to experience, understand and connect with the town is from the

water or the water's edge. As such, the Waterways remain the most important of all place-makers, are rightly at the core of the Taunton Garden Town Vision and are as important to the town's future as they were to its past.

This Strategy and the Guidance that it incorporates have been grant funded by Government Garden Town capacity funding. They will help the town to properly re-establish the Waterways as an enormously valuable asset, and to optimise the benefits that can be derived from the asset for the good of Taunton's communities, environment and economy. The 'Outcomes from Investment' indicate the wealth of benefit that can and should be drawn from

well-planned and well-managed Waterways, not the least of which is the crucial on-going management of the water itself to protect the town from flood risk.

We are particularly appreciative of the collaborative and willing attitude expressed by each of the key Stakeholders, including the water-management agencies, who have supported preparation of the Strategy, sharing their valuable time, energy, knowledge and ideas. That sharing of perspectives, and the collective willingness to achieve wide-ranging and long-lasting benefits from investment, are central to the Strategy and its implementation and we look forward to working together going forward.



Councillor Mike Rigby, Lead Member for Economic Development, Planning and Assets

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This document has been prepared and
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Executive Summary

The Taunton Waterways Strategy has a spatial focus extending from the Silk Mill park and ride facility west of Longrun Meadow to the M5 motorway, encompassing both the River Tone and the Taunton and Bridgwater Canal. It incorporates the tributaries that connect to the river and canal through the town's neighbourhoods.

The Waterways Strategy sets out to enable the necessarily incremental investment in Taunton's waterways to be better coordinated, so that responsible bodies are identified and work to a common direction, and each investment contributes towards a suite of positive outcomes and delivery of Garden Town principles.

The intention is to adopt the Strategy as a material planning consideration for planning decision-making, and adoption of the Strategy will further demonstrate Somerset Council's commitment to

delivering on Garden Town principles, strengthening funding bids and helping to lever other funding sources that will be vital to achieve delivery. Over time, and subject to the identified projects and recommendation securing funding, the Strategy will make the water corridors feel more like a cohesive linear asset that benefits the town as a whole, and the effectiveness of each investment will be multiplied by the interaction with other investments.

The purpose of this document is to provide a clear, overarching strategy and supporting guidance to direct investment in Taunton Waterways to bring about and sustain coordinated improvement for the benefit of the whole town, in alignment with the Taunton Garden Town Vision, the Local Plan and committed water management and maintenance projects.

The Taunton Waterways Strategy and Guidance has been prepared on behalf of Somerset Council by LDA Design and Calm Engineering, with EAD Ecology and a supporting team. It has involved analysis of key Issues, Constraints and Opportunities relating to different parts of the Waterways, from catchment-wide and town-wide challenges and potential, down to more detailed Character Areas.

At the heart of the commission has been a group of key stakeholders who have worked collectively to provide the information, understanding and direction necessary to ensure that the content of this document is accurate and that the strategy and associated guidance have a realistic prospect of being implemented. That collaborative approach is at the core of defining, and implementing, the Waterways Strategy.

Outputs include:

- a **maintenance and management plan** which has been developed in consultation with the Lead Local Flood Authority, Environment Agency and Canal and River Trust
- identification of strategic goals for the strategy to deliver
- definition of prioritised investments
- provision of, site-specific design guidance (primarily for the brownfield regeneration sites within the Waterways as allocated for redevelopment in the Taunton Town Centre Area Action Plan October 2008), and guidance for smaller potential sites close to the tributaries within Taunton's neighbourhoods
- delivery-focused recommendations and
- identification of potential funding sources, the receipt of which are necessary to deliver the strategy and projects



1 Introduction

1.1 Study area

The spatial focus for the Taunton Waterways Strategy extends from the Silk Mill park and ride facility west of Longrun Meadow to the M5 motorway, encompassing both the River Tone and the Taunton and Bridgwater Canal. It incorporates the tributaries that connect to the river and canal through the town's neighbourhoods.

Necessarily it demands an understanding of and commentary upon the wider river catchment, extending upstream and downstream beyond the town since investment here can have a significant effect on water management and use within Taunton. The wider river catchment lies beyond the scope of this commission, but key opportunities are referenced at higher level and encompassed with the strategy.

1.2 The need for a strategy and guidance

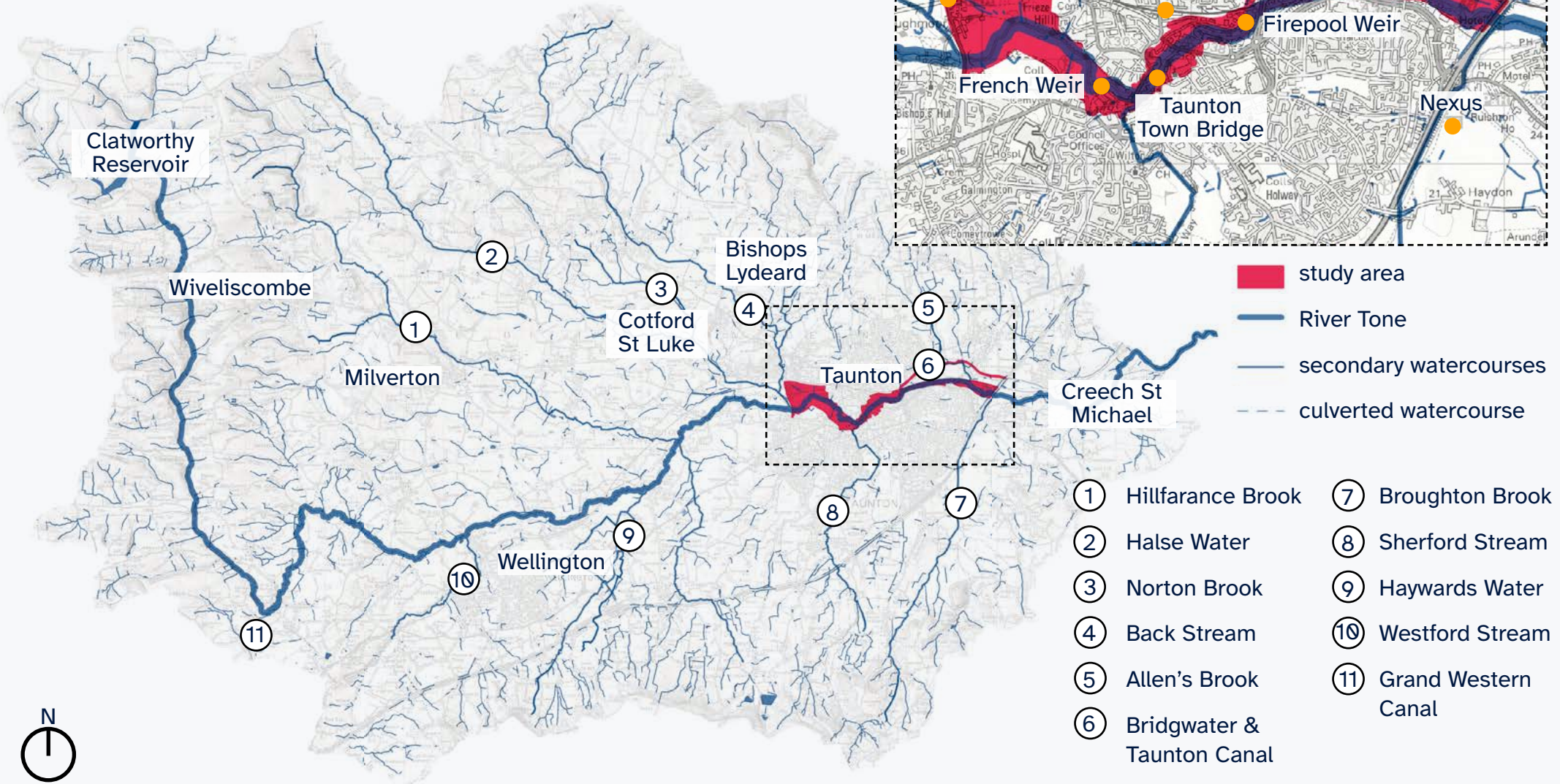
Taunton is one of the UK's Garden Towns and one of its key objectives is to rediscover the historic connection between the town and its surrounding landscape. Whilst Taunton looks to connect outwards, it also seeks to turn its face and activity towards the river and put the river at the heart of the town in a positive way, rather than a negative association with its waterways as a result of risk of flooding. One of the means identified for achieving that positive association is by making the most of its river, canal, streams and watercourses. The aim is to transform the perception of Taunton over time, so that it is once again recognised as a town and culture embedded within its remarkable natural environment and it is that water-based environment that was, remains and will continue to be one of the key reasons for Taunton's appeal and success.

Placing rivers, canals and watercourses at the centre of transformative regeneration

is not without its challenges. There are overlapping responsibilities for maintenance of the river, canal and tributaries, and each responsible agency has different needs, approaches, funding criteria and priorities. For these agencies, effective water conveyance is the critical driver of investment. Managing flood risk is fundamental to the town and surrounding area and transformative measures to improve the town must not hinder the effectiveness of the investment and initiatives proposed. However, where practical, solutions should be planned and designed to deliver additional benefit, over and above the functional conveyance of water.

Additional to the multiple water management agencies is the multiplicity of riparian landowners, and a wide range of other agencies involved in investment within the Waterways Corridor, encompassing recreation, wayfinding, highways and the development of waterside sites for example, and so the complexity of the situation becomes clear.

River Tone catchment and study area



Further, there is no single funding pot to bring about that transformation and so there is a heavy reliance on investment in individual projects which tend to fall into three groups:

- investments in the maintenance or improvement in water management - primarily designed to serve a functional purpose
- investment that responds to the availability of Government funding and addressing specific agendas, for example in wayfinding, active travel and public realm enhancement related to town centre rejuvenation
- redevelopment of major brownfield sites within the water corridors where the need for commercial viability can constrain the ambition of investment to only what is essential to bring development forward

Over time, these investments will bring about change and improvement, but unless there is strong coordination, clarity on responsibility and a concerted movement to a common set of goals, the investment will either not be realised or will be ad hoc

and the opportunity for the Waterways to bring about the sort of transformational change envisaged by the Garden Town Vision such as benefits to the wider town and linking up to wider green infrastructure, which in turn will also deliver wider benefits, will be missed.

There is therefore a need for an overarching Waterways Strategy that enables the necessarily incremental investment to be better coordinated, so that responsible bodies are identified and work to a common direction, and each investor contributes towards a suite of positive outcomes. The water corridors will start to feel more like a cohesive linear asset that benefits the town as a whole, and the effectiveness of each investment will be multiplied by the interaction with other investments.

Every future investment in the water corridors will be informed by the Waterways Strategy and will need to demonstrate how it adheres to the associated guidance. With the Strategy and Guidance in place, gradually, as major water-related projects,

waterside redevelopment of allocated sites and delivery of smaller scale public realm improvements come forward, there will become a higher quality of waterside environment, better connectivity along the waterways, improved awareness of the role, and importance of water to the town and a higher level of water-focused activity in particular around the town centre, all of which will help to sustain the town's long term vitality, reinforce its character, sense of place and livability.

The purpose of this document is to provide a clear, overarching strategy and supporting guidance to direct investment in Taunton Waterways to bring about and sustain coordinated improvement for the benefit of the town as a whole, in alignment with the Taunton Garden Town Vision, the Local Plan and committed water management and maintenance projects. It also provides planning guidance for allocated town centre brownfield development sites located adjacent or in close proximity to the waterways.

The document prioritises future initiatives, projects and investments within the Waterways, setting out clearly where further work is required to support a coordinated approach to investment. It also provides a structure around which the diverse group of stakeholders and the Taunton community can work collectively to achieve wide-ranging positive outcomes from all investments in, adjacent and related to the Waterways. The Strategy and Guidance will assist responsible bodies in making well-informed decisions about the Waterways and the related environment, supporting collaboration, helping to target funding opportunities more effectively and becoming a material consideration in planning decision-making.

1.3 Continuity

The Taunton Waterways Strategy has been instigated by the Taunton Garden Town Team and is integral to its implementation. It is part of an on-going process aimed at optimising the value of the Waterways for the benefit of the town as a whole. This section summarises the key work that led to this Strategy.

Previous relevant work on Taunton waterways

The Strategy builds on a body of previous work undertaken by the Council including the River Tone Task and Finish Group (2014) which was established to identify projects which would improve the River Tone and its surroundings. The associated Working Group, and the Taunton Town Centre Rethink Framework that was developed and published at the same time, raised the importance of the River Tone to Taunton and stated that it should be placed at the centre of the Council's future development plans.

The Taunton Rethink highlighted the need for a more detailed action plan and strategy and set the foundation for design work undertaken by Atkins in 2018 and 2019. Only Stage 1 of that work was completed, and it forms an important part of the evidence that informs the new Strategy.

The new Strategy also brings matters up to date through the involvement of a wide range of stakeholders to ensure its alignment with current and projected water-related investments and planned maintenance and management projects.

The opportunities, direction and actions identified within the Strategy are deliberately high level and are intended to stimulate and structure discussion and cooperation amongst the key organisations responsible for the Taunton Waterways going forward, as well as helping to deliver some 'quick wins'.

The Strategy is therefore an important step in an established and on-going process rather than a free-standing document. The strategies and projects identified in the document will need to be further developed, tested, designed and funded and will inevitably be refined through that process. In order to avoid the Strategy and Guidance rapidly becoming out of date, proposals are included for improved governance across the key stakeholder organisations so that the principles established in this piece of work will continue to be upheld long after the commission has come to an end.



1.4 Collaborative working

The Taunton Waterways Strategy and Guidance has been prepared on behalf of Somerset Council by LDA Design and Calm Engineering, with EAD Ecology and a supporting team.

At the heart of the project has been a group of key stakeholders who have worked collectively to provide the information, understanding and direction necessary to ensure that the content of this document is accurate and that the strategy and associated guidance have a realistic prospect of being implemented. That collaborative approach is at the core of defining, and implementing, the Waterways Strategy.

Project team

The project team is a collaboration between:

- Somerset Council (Garden Town Implementation Manager and Green Infrastructure Officer)
- LDA Design (Planning and regeneration Urban and landscape design)
- Calm Engineering (Water management / Civil engineering)
- EAD Ecology (Biodiversity and ecology)
- City Science (Active travel and transport)
- SLR consulting (Local transport)
- Peter Gunning & Partners (Costs)

Stakeholder team

We wish to thank the following stakeholder organisations for their time and engagement in the process of defining a strategy and guidance for Taunton's Waterways:

- Canal and River Trust
- Environment Agency
- Farming and Wildlife Advisory Group (FWAG Southwest)
- Somerset Council Lead Local Flood Authority (LLFA)
- Somerset Council Landscape, Open space, and Green Infrastructure
- Somerset Council Taunton Garden Town, Town Planning and Regeneration
- Somerset Council Highways Authority
- Somerset Council Active Travel
- Somerset Council Ecology
- Somerset Council Community
- Somerset Council Climate Change
- Somerset Council Placemaking
- Somerset Council Public Rights of Way (PRoW)
- Somerset Council Cultural Strategy
- Somerset Drainage Board Consortium
- Somerset Rivers Authority
- Somerset Wildlife Trust
- Taunton Town Council
- Wessex Water

1.5 Structure of the strategy and guidance document

Section 2 of this document states the primary aim of the Strategy and Guidance in the context of the established Taunton Garden Town Vision. It also sets out and illustrates the ‘Outcomes from Investment’ which have been defined by the project team and endorsed by the stakeholder group.

These represent the values behind the Strategy and form criteria against which potential investments should be considered: the aim being to deliver multiple positive outcomes across four key distinct but related categories.

The Taunton Waterways Strategy and Guidance has not been prepared in a vacuum: it is informed by changing global and local environmental context, variation in national policy drivers and agendas and the continuous supply of new information. The contextual factors

of particular relevance to this piece of work are referenced in **Section 3**.

The broad geographical spread of the waterways and interactions between different parts of the water network has necessitated a strategic spatial approach that defines three Functional Areas for ease of reference: Catchment-wide, Town-wide and Central Area, as illustrated and described in **Section 4**. The definition of Functional Areas has determined a set of base maps that are used throughout the document for consistency.

The map-based **Section 5** highlights the key Issues, Constraints and Opportunities relating to different parts of the Waterways, from catchment-wide and town-wide challenges and potential, down to the more detailed Character Areas. This section has been substantially informed by the Stakeholder Team and is primarily focused on water management.

The Management and Maintenance Plan (MMP) for the Waterways is summarised in **Section 6** with more detail provided in Appendix B. This part of the document

addresses committed and planned management and maintenance projects which are established and do not need to be assessed or prioritised in this Strategy. The MMP has been developed in consultation with the LLFA, Environment Agency and Canal and River Trust and is designed to provide an overview of the maintenance and management of the waterways through Taunton, and some wider aspirations on the future maintenance and management of these systems as the town and wider catchment evolves over the next 30 years. The responsibilities of riparian owners are highlighted in the MMP.

Section 7 sets out the Goals of the Taunton Waterways Strategy that need to be achieved if the maximum benefit is to be derived from the town’s water assets in line with the Taunton Garden Town Vision. Its remit is wide-ranging, from evolving and sustaining a collaborative mindset among stakeholders, through to education and engagement programmes that raise awareness of the importance of water to the lives of all of the town’s residents, employees and visitors.

The overarching objective of the Strategy is to coordinate incremental investment in such a way that the ‘whole’ becomes greater than the sum of the individual investments, which is one of the building blocks of successful and sustained urban regeneration. It is also intended to support funding bids, thereby leveraging in investment.

In **Section 8**, the process of identifying, evaluating and prioritising potential investments is outlined, and the nature of the prioritised investments is described.

The Strategy encompasses the need for site-specific design guidance, primarily for the brownfield regeneration sites within the Waterways as allocated for redevelopment in the Taunton Town Centre Area Action Plan October 2008 to ensure that opportunities to re-connect the town with the River Tone are maximised when these sites are redeveloped. This is supplemented by guidance for smaller potential sites close to the tributaries within Taunton’s neighbourhoods.

The design guidance is set out in **Section 9** and is intended to be adopted as a material planning consideration for planning decision making purposes.

Section 10 is focused on delivering the Strategy. It builds on the willingness to collaborate demonstrated by all of the key stakeholders throughout the process of preparing the Strategy and Guidance, considers existing Governance structures and illustrates a possible Governance approach. The stakeholders have endorsed the principle of utilising a body to inform better coordinated investment over the longer term and one of the priorities identified by the Strategy is to implement that Governance Structure at the earliest opportunity.

Document Structure

Key Outputs

Section 2 Primary aim and outcomes from investment



Vision & values behind the strategy, outcomes from investment

Section 3 Context for the Taunton Waterways Strategy



Planning, climate change, ecological background and other contextual research

Section 4 Strategic spatial approach



Defining functional and character areas

Section 5 Issues, challenges, opportunities



Map-illustrated issues, constraints & opportunities for catchment/individual character areas

Section 6 Summary of maintenance and management plan

Section 7 Taunton Waterways strategy



Strategic goals and overarching objectives of the strategy

Section 8 Prioritised investments



Individual project identification, evaluation and shortlisting

Section 9 Design principles



Site-specific design guidance

Section 10 Delivery



Proposal of a governance structure and coordinated investment

2 Primary aim and outcomes from investment

The primary aim for Taunton Waterways Strategy and Guidance is framed by the Taunton Garden Town Vision. The Strategy is firmly consistent with that overarching Vision and is designed to work with the direction established by the Garden Town initiative. As such, they are wholly compatible.

2.1 Taunton Waterways Vision

The Taunton Garden Town Vision was adopted in July 2019.

“Taunton will be flourishing, distinctive, and healthy – and the country’s benchmark Garden Town. We will be proud to live and work in a place where the outstanding natural environment, diverse and thriving economy and inspiring cultural offer, contribute to an exceptional quality of life and well-being.” (Taunton: The Vision for Our Garden Town, page 26).

“A key objective of the Garden Town Vision...is to re-establish connections between Taunton and the surrounding landscape by making the most of its rivers, canal, streams and watercourses.” (Taunton Garden Town 2040 Prospectus, page 25).

In this context, the primary aim of the Taunton Waterways Strategy and Guidance is to maximise the positive placemaking, environmental and community outcomes that can be achieved from every investment made in water management and waterside development.

The Vision for Taunton Garden Town includes four Vision Themes which provide important context for the Waterways Strategy and are reproduced here:

“Grow our town greener - transforming our open spaces and streets Quality of our Environment: Give Taunton a green makeover, joining up green spaces, waterways, parks and play spaces, planting more street trees and woodlands and

managing our water more imaginatively with wetlands and in gardens to improve it for recreation, tourism and wildlife.”

“Growing quality places to live - town centre, new and existing neighbourhoods Quality of our places and neighbourhoods: Deliver an outstanding built environment, focused on places and spaces with high quality neighbourhoods, green streets and public spaces and with homes and buildings that are distinctly local in appearance whilst embracing innovation, energy efficiency and exploiting the latest sustainable technologies.”

“Branching out – moving cleaner, moving smarter Quality of our Movement: Integrate our transport network so that it serves Taunton with much improved bus and appropriate vehicle links to our main destinations and make much better prioritised provision for walking and cycling, encouraging healthier and more sustainable journey choices as attractive alternatives to travelling by car.”

“New shoots and blossom – a dynamic and prosperous community founded on knowledge, culture and business Quality of opportunity: Responsibly nourish partnership, prosperity and growth in social value, through our strengths in knowledge, education, culture and business. Germinate and grow sustainable arts and cultural venues as hubs that foster excellence in the region. Pursue low carbon and digital infrastructure to make a town that connects businesses and markets well, drawing on our University Centre and growth industries in digital, land, marine informatics, health and nuclear.” (Taunton Garden Town 2040 Prospectus, page 7).

Firepool pumphouse



2.2 Outcomes from Investment

To achieve that primary aim, a set of desired 'Outcomes from Investment' has been agreed with the Stakeholder Group and these have been used, and will continue to be used, to evaluate and prioritise potential investments in the Waterways Corridor.

Intentionally, these encompass a wide range of potential benefits that extend beyond the considerations traditionally associated with investment in water-related projects. Consideration is still given to achieving operational water requirements, but the breadth of desired Outcomes includes improved awareness of the presence of water throughout the town and its importance in delivering biodiversity, health and wellbeing and decarbonisation benefits for example.

The Outcomes are specific to the Taunton Waterways Strategy but are compatible with the Garden Town Vision Themes set out above and, accordingly, encompass Placemaking, Environment and Community in addition to water-related Operations.

Desired outcomes from investment:

Placemaking

- the Waterways are an increasingly recognised component of Taunton's Garden Town identity and sense of place
- more people are aware of the importance of the Waterways to the town
- waterside spaces and connections are sociable, safe and welcoming
- the water stimulates market interest, value and investment and is a positive factor in urban regeneration
- the Waterways are increasingly part of the attraction to Taunton, appealing to investors, residents, employees, and visitors

- enhanced management of water, flood prevention, environment and opportunities for healthy living helps to address constraints to development and unlocks growth of the Garden Town

Operations (Water)

- effective water conveyance is continued and improved (effective water courses, water/flood management, maintenance and operation)
- investment in water-related infrastructure is resource-efficient
- the Waterways incorporate nature-based solutions that help to improve water quality.
- water-related safety is not diminished
- the Waterways, including waterside communities and environments, are more resilient to the impacts of climate change
- strong collaboration across responsible agencies

Environment

- the Waterways serve as a green link connecting the town's natural assets to one another and to the countryside
- biodiversity is protected and enhanced
- investment in the Waterways assists with Nature Recovery across the town
- nature in the water corridors is more accessible to all
- waterways investment protects sequestered carbon where practical
- the Waterways assist decarbonisation in the town

Community

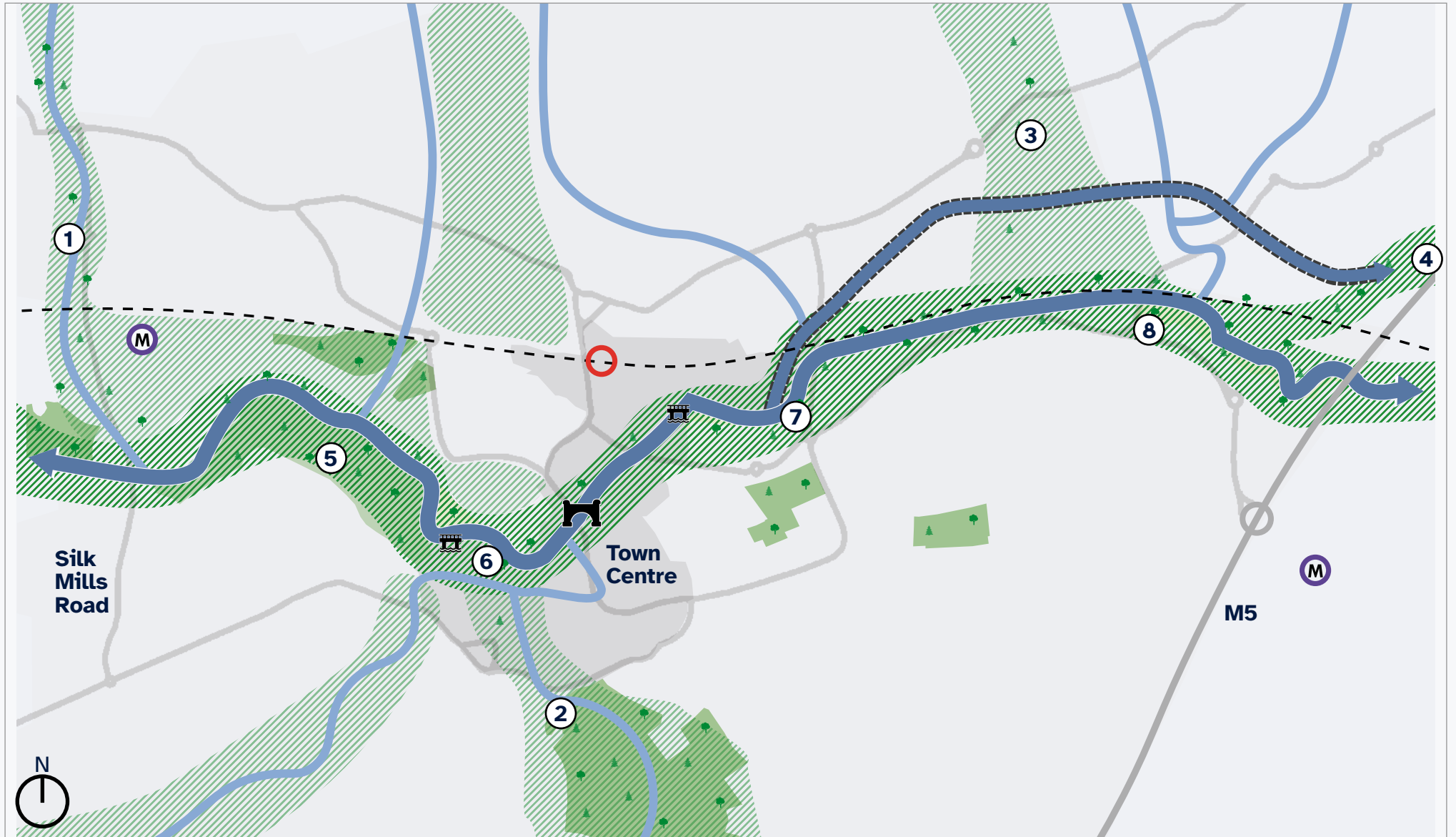
- community understanding of the special qualities of the waterways is improved (strategic through to detail)
- accessibility by all to the water corridors, and to the water, are improved
- the safety and convenience of active travel connections along the water corridors is enhanced
- the water assets are used to promote wellbeing and healthier lifestyles
- the Waterways are active corridors, connecting and uniting communities and points of interest in the town to one another and to the countryside
- reconnection between the town and the waterways stimulates Social Value
- the Waterways support a wide range of activities and uses
- the Waterways are the source of increased income generating opportunities

The following high-level vision graphics illustrate the Outcomes from Investment themes and incorporate the Taunton Garden Town Vision themes on Active Travel and Placemaking principles. They set the scene - exploring opportunities in Taunton's town centre and town-wide areas, referred to in more detail in Section 9 of this document.















Firepool Weir

Environment and water: continuous green and blue corridor



Key

-  French Weir (west)/ Firepool Weir (east)
-  A road network / M5 (east)
-  Silk Mill Park & Ride (west) / Taunton Gateway Park & Ride (east)
-  Town Bridge
-  town centre
-  railway and train station
-  parks / greenspaces
-  watercourse (river)
-  watercourse (canal)
-  continuous green corridor
-  tributary stream connections
-  green connections

- ① Backstream Green Wedge
- ② Vivary Green Wedge
- ③ Allen's Brook Green Wedge
- ④ Tone Levels Green Wedge
- ⑤ Longrun Meadow
- ⑥ Goodland Gardens
- ⑦ Children's Woods
- ⑧ Hankridge Riverside

Connecting green parks along corridor,
enhancing connection to water and
children's physical activity


















The River Tone is central to Taunton - this will be emphasised with the creation of a continuous green corridor running east to west. This will be multi-functional, providing a linear park and active travel connectivity along its length, with improved access and frontage to the water, whether adjacent green space or buildings or public spaces in the town centre. This will serve as a green link connecting the town's natural assets to one another and to the countryside, also protecting and enhancing biodiversity and making Taunton more resilient to the impacts of climate change.



Active lifestyle: cycle infrastructure and stream connections



Key

-  French Weir (west)/ Firepool Weir (east)
-  A road network / M5 (east)
-  Silk Mill Park & Ride (west)/ Taunton Gateway Park & Ride (east)
-  Town bridge
-  Town centre
-  railway and train station
-  parks / greenspaces
-  watercourses
-  National cycle network (NCN route 3, Green Route)
-  Strategic cycle route (Blue Route)
-  aspirational cycle routes 35/36
-  local cycle routes
-  connecting garden communities cycle routes
-  tributary stream connections
-  town centre connections

- ① Galmington Stream
- ② Sherford Stream
- ③a ③b Black Brook
- ④ Allen's Brook
- ⑤ Nexus
- ⑥ Longrun Meadow
- ⑦ Children's Wood
- ⑧ Bathpool
- ⑨ Creech St. Michael
- ⑩ Firepool
- ⑪ Silk Mills

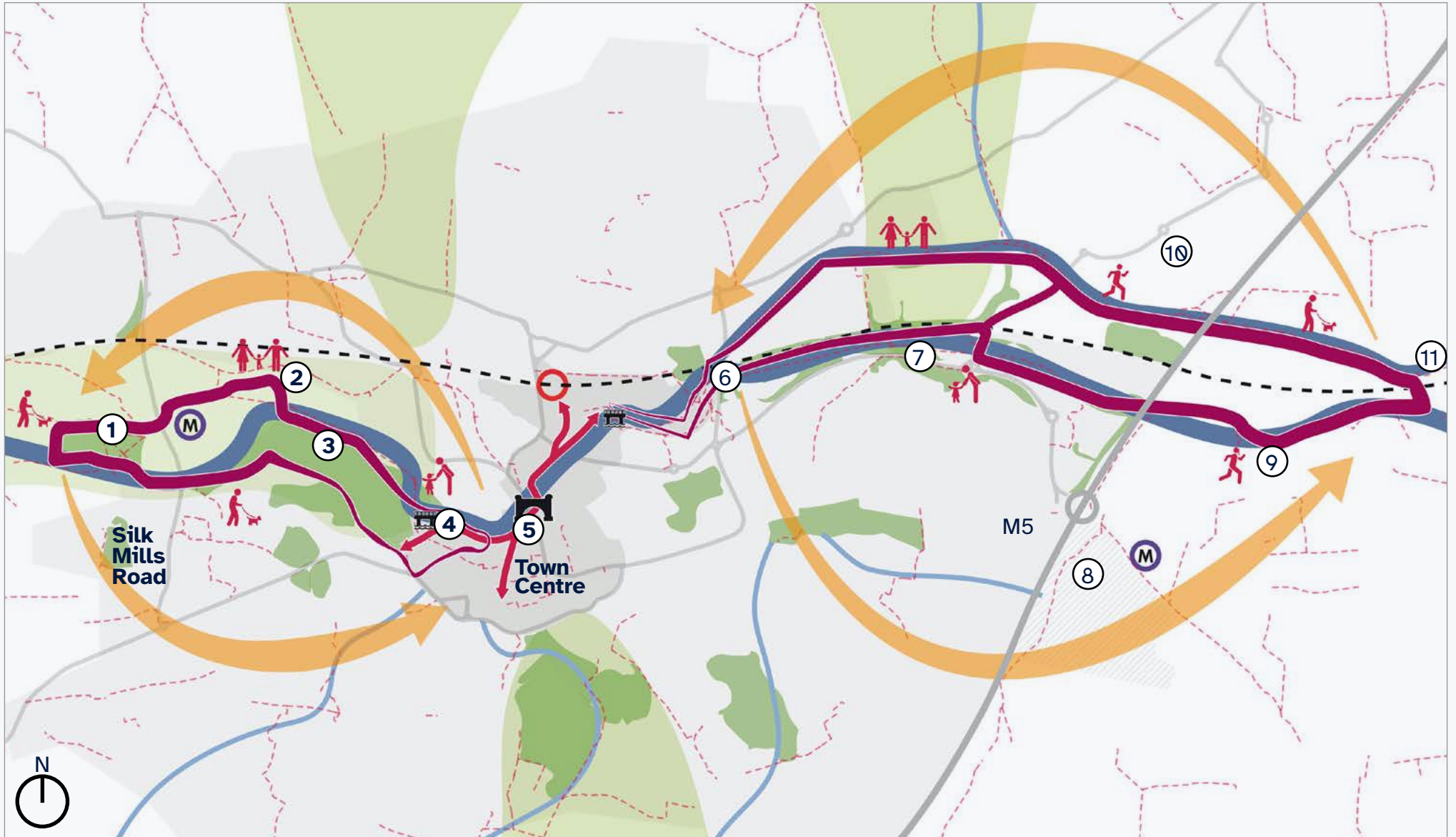
Enhanced cycling connectivity, activity in outskirts and rural areas
















Proposals for Taunton will create wider connectivity for active travel along the River Tone and the canal through key green spaces, building on the existing National Cycle Network route 3 (that connects all the way from Land's End to Bristol) and introducing new strategic connections to the east and west out of Taunton town centre to mobility hubs and employment sites such as Nexus for both commuting and leisure cycling, wheeling and scooting. Additionally supporting routes alongside tributary streams will provide connections between the town centre, the neighbourhoods and surrounding countryside, joining with the key strategic routes for active travel.



Walking loops: east to west connectivity

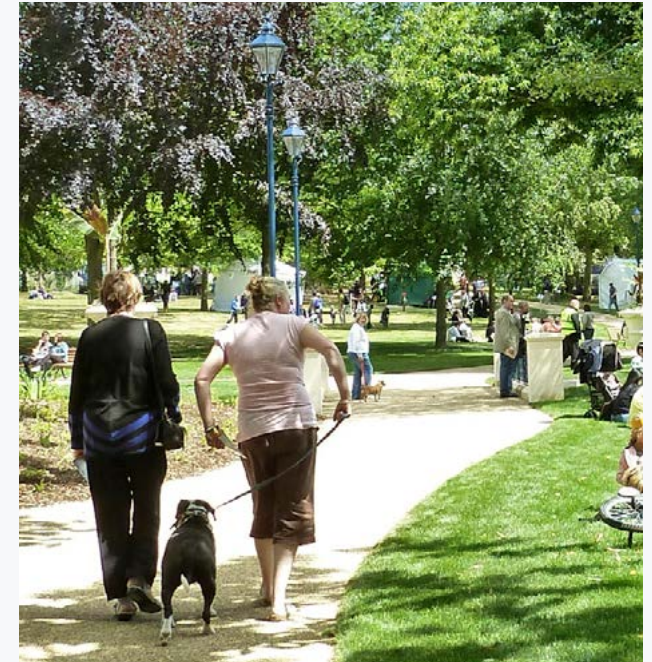


Key

-  French Weir (west)/ Firepool Weir (east)
-  A road network / M5 (east)
-  Silk Mill Park & Ride (west) / Taunton Gateway Park & Ride (east)
-  Town bridge
-  Town centre
-  railway and train station
-  public rights of way
-  parks / greenspaces
-  green wedges
-  watercourses
-  walking loops
-  town centre connections
-  strategic connectivity

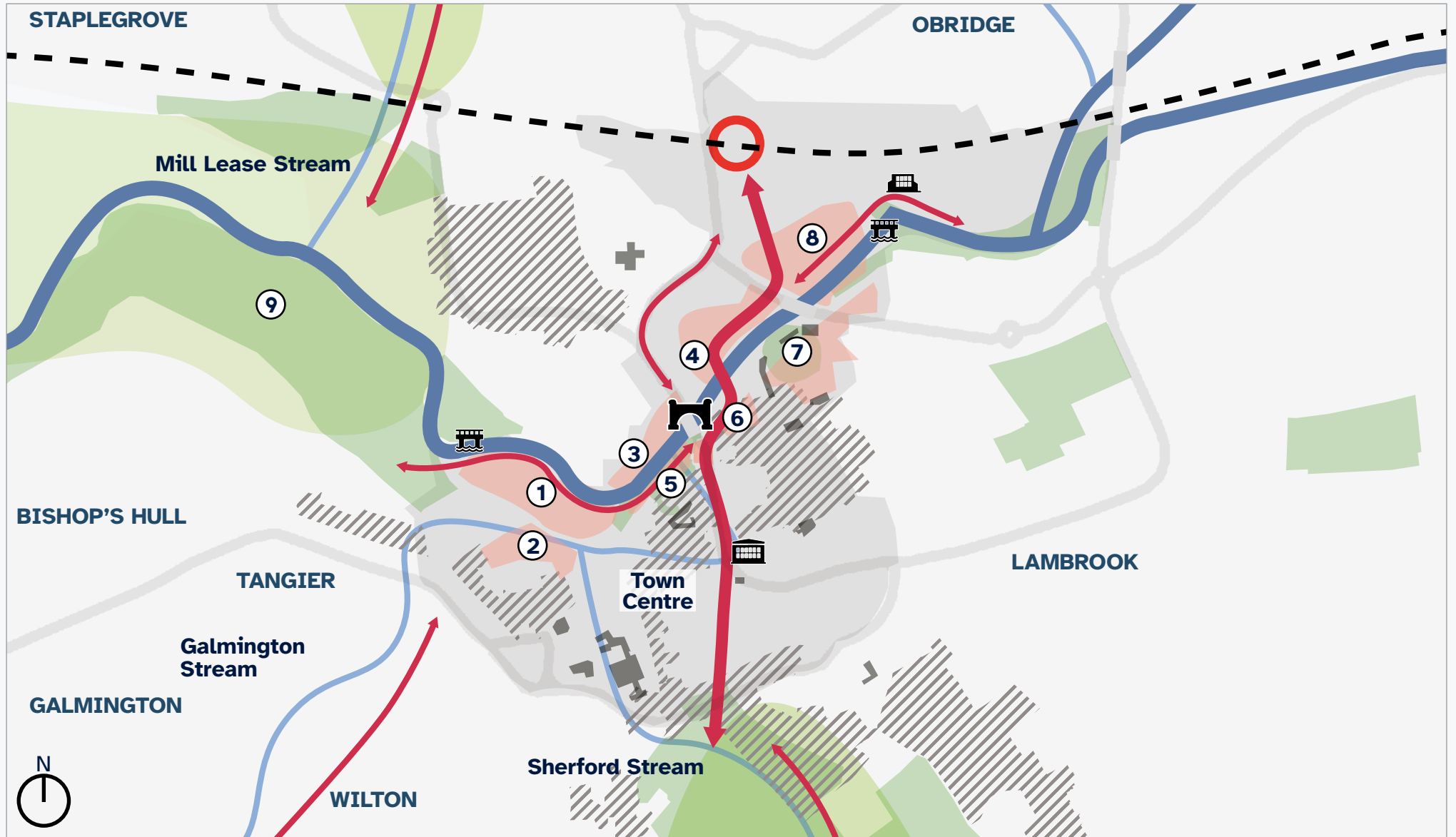
- ① Netherclay Community Woodland
- ② Frieze Hill
- ③ Longrun Meadow
- ④ Tangier
- ⑤ Goodland Gardens
- ⑥ Children's Wood
- ⑦ Hankridge Riverside
- ⑧ Nexus
- ⑨ Ruishton
- ⑩ Monkton Heathfield
- ⑪ Creech St Michael

Creating wider connectivity along the river and canal and through key green spaces, creating loops for walking both through the town centre and east (beyond the M5) and west (beyond Silk Mills Road) linking to Netherclay Community Woodland, Frieze Hill and to Ruishton, Monkton Heathfield and Creech St Michael. Improved connections between Public Rights of Way and the Waterways Corridor.
















Key activities - dog walking

Placemaking : connecting old and new communities



Key

-  French Weir (west)/ Firepool Weir (east)
-  town bridge
-  market house
-  pumphouse
-  town centre
-  train station
-  parks / greenspaces
-  green wedges
-  conservation areas
-  development sites
-  watercourses
-  north-south active travel route
-  connections between old and new

- ① Tangier
- ② Tesco
- ③ Wood Street
- ④ Morrisons
- ⑤ Debenhams
- ⑥ Coal Orchard
- ⑦ Cricket Ground
- ⑧ Firepool
- ⑨ Longrun Meadow

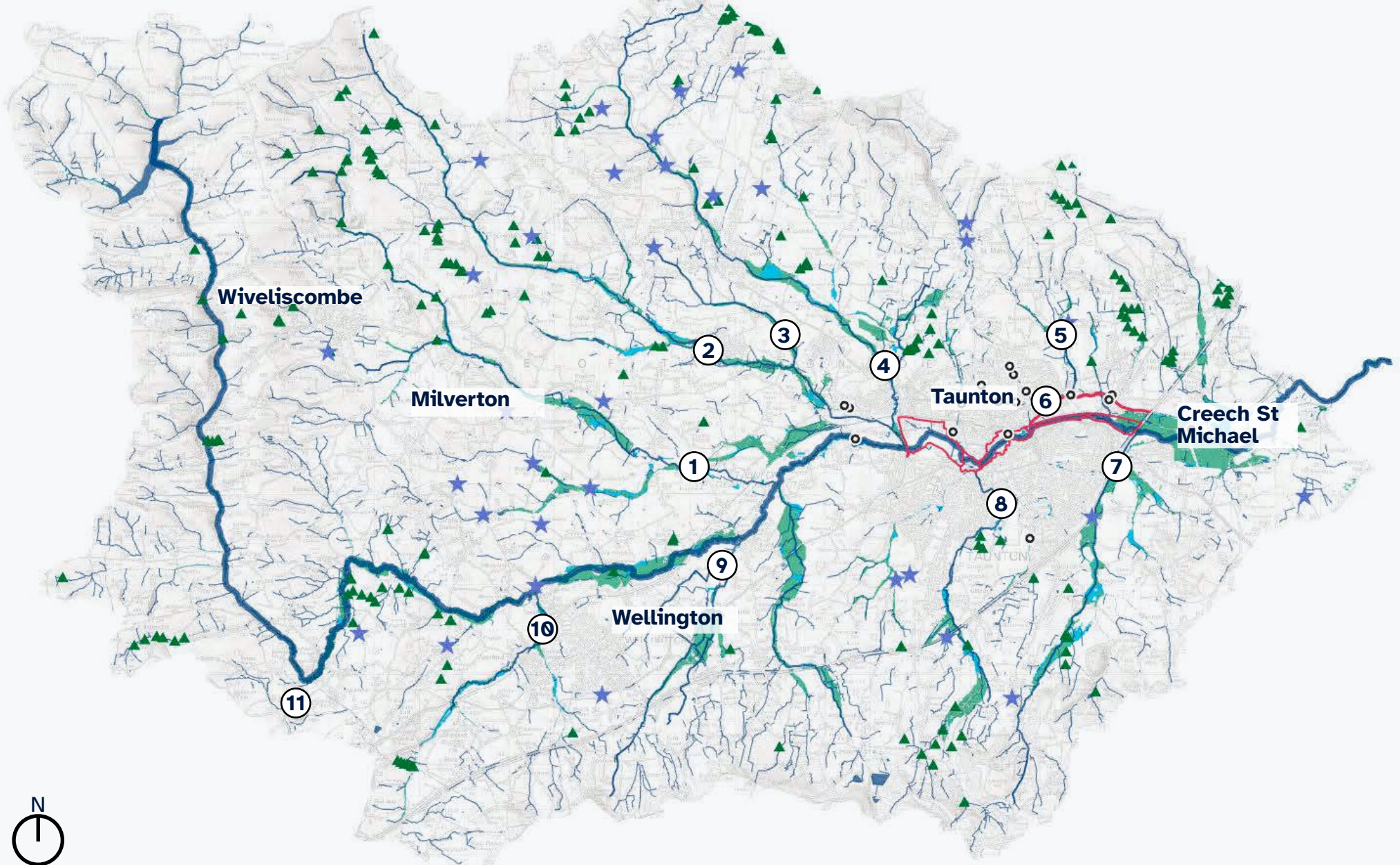


To illustrate: Old versus new architecture, activity and movement within the town

The Tone will increasingly be recognised as part of Taunton's Garden Town identity, central to its sense of place. New development that sits between the two weirs, will strengthen the town's relationship with the River Tone, respect the Conservation Areas within the town centre, encourage movement and activity both through new development and to existing areas. Waterside activity and uses will be complementary to the town's offer, enhancing attraction to Taunton - building on the existing Independent Quarter and shopping offer along Station Road, Bridge Street, North Street and Fore Street.

A new pedestrian and cycle bridge would strengthen the active travel movement from the train station, through the historic town centre to Vivary park in the South. Plans are to extend the cycle route to the recently completed Coal Orchard regeneration site, building a new bridge over the river connecting to the planned boulevard within the Firepool regeneration site. This is a key connector and it is important to determine the ideal location and design solution.

Map showing the catchment-wide opportunities for the River Tone



Key

- study area
- River Tone
- secondary watercourses
- opportunity to reduce debris screen maintenance
- ▲ hills to levels Natural Flood Management schemes
- ★ FWAG future projects (highway referrals)
- floodplain tree planting opportunities
- floodplain reconnection opportunities

- 1 Hillfarance Brook
- 2 Halse Water
- 3 Norton Brook
- 4 Back Stream
- 5 Allen's Brook
- 6 Bridgwater & Taunton Canal
- 7 Broughton Brook
- 8 Sherford Stream
- 9 Haywards Water
- 10 Westford Stream
- 11 Grand Western Canal



Wider catchment areas - wetland area at Longrun Meadow Park



Wider catchment areas - rural Canal

3 Context for the Taunton Waterways strategy

The Taunton Waterways Strategy and Guidance is part of planning policy and guidance documents that are used to achieve the council's visions and ambitions for creating greener and better places. This section identifies the key documents that establish the context for the Strategy and will be most relevant to its delivery.

3.1 Planning Context

Taunton Deane Borough Council Core Strategy (adopted in 2011)

The Core Strategy states that "...the growth strategy for Taunton is to regenerate the town centre, providing a stronger and more vibrant core with a dynamic and diversified economy, a choice of residential accommodation, retail, leisure, community, sporting and cultural facilities." Numerous brownfield opportunity sites have been identified and allocated by the Council for redevelopment. The Core Strategy

Vision for Taunton identifies the River Tone as playing a significant role in that regeneration, becoming "...an attractive corridor through the heart of the town, linking the redevelopment sites."

Additionally, "green wedges between the different areas of the town will be retained and enhanced, helping to provide a network of green infrastructure linking the heart of the town with the surrounding countryside" and the tributaries connecting into the river and canal network offer important opportunities for enhancement within those wedges.

The Core Strategy also recognises the importance of biodiversity through Strategic Objective 8 (Environment) which aims: "...to maintain and enhance biodiversity, the natural and man-made environment..." and policies CP1 (Climate Change) and CP8 (Natural Environment) set out requirements to achieve no net loss in biodiversity and to conserve and enhance the natural and historic environment. The Waterways are a key strategic asset that can help the town to achieve these policies.

A new Local Plan for Somerset is in the process of being prepared, but is at too early a stage to inform this work.

Taunton Deane Site Allocations and Development Management Plan 2028

Whilst the Core Strategy establishes the long-term requirements for growth and its broad distribution, with the exception of a number of strategic site allocations and high level policies, it does not set out smaller allocations. The Site Allocations and Development Management Plan fits within the framework of the Core Strategy and sets out both detailed site allocations up to 2028 and specific development management policies with which development must comply.

Taunton Town Centre Area Action Plan 2008

The adopted Area Action Plan for the Town Centre provides the policy framework to guide the redevelopment of several key waterside sites, including Coal Orchard which has been built out, and the Firepool site which is underway. The Taunton Waterways Strategy and Guidance commission is an important opportunity to provide further design principles to ensure that opportunities to re-connect the town with the River Tone are maximised when these sites are redeveloped.

Taunton Garden Town

Taunton was designated as a Garden Town in 2017 by the Government. The Garden Town Vision proposed a comprehensive approach to improve the quality of development, strengthen the connections between town and country through a network of green spaces, with specific reference to the role of the Waterways.

The Vision and Vision Themes are referenced in section 2.1 above.

The importance of the 'blue infrastructure' is highlighted on page 26 of the Taunton Garden Town 2040 – Town Centre Prospectus:

“A key objective of the Garden Town vision is to re-establish connections between Taunton and the surrounding landscape by making the most of its rivers, canal, streams and watercourses. Taunton owes its location to the River Tone and its tributaries. Together with the Bridgwater and Taunton Canal, the River Tone connects the town to the surrounding countryside. However, at present much of the town turns its back on the river.

The River Tone provides opportunities for enhancing and creating multifunctional green infrastructure corridors, balancing access and ecological enhancements and linking regeneration sites.

The existing green connections into the town from Longrun Meadow, Firepool

Lock and Vivary Park need to be joined up, through the creation of pleasant and attractive pedestrian and cycle routes along the River Tone and through the town centre.

The design of new neighbourhoods will consider how water can be managed intelligently to manage storm water, facilitate irrigation, and promote habitats resilient to flooding and climate change, aligned with the Taunton Strategic Flood Alleviation Improvements Scheme.”

The Taunton Waterways Strategy and Guidance document is designed to develop a clearer understanding of what those opportunities might be and how they may be delivered.

Since designation, the Council has published the:

- Taunton Design Charter and Checklist (October 2019)
- Taunton Garden Town 2040: Town Centre Prospectus (January 2021)

- Adopted Taunton Garden Town Public Realm Design Guide Supplementary Planning Document (SPD) (December 2021)
- Adopted District-wide Design Guide SPD (December 2021)
- Adopted masterplan for the Firepool site (adopted March 2023)

The Taunton Waterways Strategy and associated guidance are compatible with these documents and consistent with the development and design ambition and guidance that they contain. The Strategy and Guidance provide further layers of information and direction to structure and guide the delivery of successful and sustained regeneration. This document is intended to be both a tool that informs and advises all bodies investing in the Waterways corridor, and a material consideration for the Council and stakeholders in planning decision-making.

3.2 Climate change, Flood Alleviation and Ecological Emergencies

The Taunton Strategic Flood Alleviation and Improvements Scheme (TSFAIS)

Somerset West & Taunton Council (now part of Somerset Council) and the Environment Agency have partnered over a number of years to identify strategic flood risk solutions for Taunton that can both reduce the current flood risk and appropriately mitigate against the future impacts of climate change. The Taunton Strategic Flood Alleviation and Improvements Scheme (TSFAIS) identified multiple schemes which collectively would deliver strategic flood solutions for the town.

The TSFAIS Framework sets out 12 projects to be delivered over the next 30 years which, in combination, would manage the predicted impact on river flooding from climate change up to 2118.

The Council is currently progressing with three short-term measures, of particular relevance to the Waterways Strategy:

- TTC5 - Left Bank of Tone Defences;
- TTC10 - Firepool Lock and associated bund between River and Canal; and
- LRM - Longrun Meadow Attenuation Improvements.

Other projects in the TSFAIS have indicative timescales, but no funding is yet secured and timescales agreed. These are referenced in the Management and Maintenance Plan.

The Carbon Neutrality & Climate Resilience Action Plan

The Council declared a climate emergency in February 2019 and adopted the Somerset Climate Change Emergency Strategy, and approved its Carbon Neutrality and Climate Resilience Action Plan (CNCR) in October 2020.

The CNCR sets out how the Council will work towards carbon neutrality by 2030 through a series of key focuses and actions and it has a significant emphasis on green and blue infrastructure. This entails a commitment to bolstering natural assets such as parks, water bodies and ecosystems to mitigate climate change impacts and enhance resilience. The plan outlines strategic measures to invest in and expand green and blue infrastructure, recognising their crucial role in fostering carbon sequestration, biodiversity, and overall climate resilience within the community. Priorities include landscaping (such as tree planting and improved vegetation cover) to enhance drainage and mitigate flood risk, and delivering biodiversity net gain and providing active travel corridors. The recently formed Local Nature Partnership is identified as a key forum for co-ordinating and delivering actions in line with the Network Recovery Strategy.

Climate Positive Planning Guidance + Net Zero Carbon Toolkit 2022

The Council also approved and published Climate Positive Planning Guidance in February 2021, which was updated in October 2023. This provides guidance and signposting to support and underscore adopted planning policies, national guidance and legislation in the interim period pending the adoption of future Local Plan(s). It specifically addresses the relevance and justification of Core Strategy Policy DM5, focusing on the use of resources and sustainable design, aligning development plans with climate-conscious principles to ensure a resilient and sustainable built environment.

The approach to delivering sustainable development, as set out in the Climate Positive Planning Guidance and associated Toolkit includes a robust appraisal of several key criteria relating, primarily, to the natural and built environments. This is demonstrated through the requirement

for a thorough environmental impact assessment, integration of green and blue infrastructure and a focus on renewable energy sources to reduce the carbon footprint. It directs redevelopment to prioritise energy efficiency, flood mitigation and resilience measures, incorporating adaptive strategies for future climate changes. Community engagement, education and partnership working are also emphasised.

Investment in the Waterways Corridor is a key means of supporting the Council's ambition to address the climate emergency. It has the potential to deliver multiple ecosystem services such as carbon sequestration; reducing the urban heat island effect and improving air quality; providing natural flood management to improve the quality of water and reduce the risk of flooding; providing attractive corridors for active travel and wildlife; bringing physical and mental health benefits and re-connecting people with nature.

Ecological Emergency Action Plan

The Council declared an Ecological Emergency in October 2020 and approved an Ecological Emergency Action Plan which seeks to address ecological issues alongside the climate emergency actions. Its objectives are to: embed nature recovery throughout the Council's work; work with partners to deliver ecological recovery and protection; enable citizens to connect and take action for nature; and to measure and communicate progress over time.

There is only passing reference to blue infrastructure within the Action Plan but the targets are relevant to any investment in the Waterways, be that for management and maintenance, large scale redevelopment of previously developed land or more modest interventions. The Waterways within the town and the wider catchment offer strategic opportunities to deliver positively and significantly against

multiple ecological targets if a coordinated approach is adopted across the Waterways as a whole.

Local Nature Recovery Strategy

The Somerset Local Nature Partnership is in the early stage of developing a Local Nature Recovery Strategy. At this stage, a number of Priority Outcomes are emerging but remain subject to further discussion and refinement. Those related to water include:

- dynamic, clean, naturally flowing (where possible) watercourses, better connected with wetlands and floodplains, and habitats on banks and margins
- rivers and streams with increased abundance and biodiversity of native plant and animal species, including keystone species

- improvement in flows and water quality will have been factors leading to almost all of the rivers in Somerset consistently being assessed in 'good ecological status' and
- riparian habitats are more extensive, healthy and diverse

Whilst these are only in draft form, they indicate the direction of nature recovery in relation to Taunton's blue infrastructure and are helpfully supported by numerous detailed measures.

Phosphates in Somerset

The Somerset Levels and Moors Ramsar Site is in an unfavourable condition due to nutrient loading, particularly phosphates resulting in eutrophication: the process by which water becomes overly enriched with nutrients resulting in excessive growth, as indicated by algae for example. The Council is committed to achieving phosphate neutrality in all new developments to address this problem.

The phosphate issue does not affect all development - it is primarily residential development or development that will produce additional waste water to waste water treatment plants).

Consequently, Somerset Council is not able to grant planning permission for new developments within the catchment that will add to phosphates unless it can be clearly demonstrated that they will not increase nutrient loading to the protected area.

Given the Garden Town vision for growth, this is a very significant challenge and a Somerset Nutrient Strategy is in development, which will identify both short-term solutions to help clear the current backlog of planning applications held in abeyance, and longer term solutions to address the deliverability of existing and future growth commitments. Interim solutions have been developed including a phosphate credit scheme with work also underway to produce a Somerset Nutrient Strategy. Somerset Council has recently been awarded capital funding of £9.6m via

the Nutrient Mitigation Fund to increase the supply of phosphate mitigation projects to unlock impacted developments in affected catchments including the River Tone.

The Taunton Waterways Strategy does not aim to replicate the measures that are likely to be identified by the Somerset Nutrient Strategy, but it will help to establish governance, facilitate collaborative working and should generate a stronger footing for funding which will all be necessary to implement solutions.

3.3 Other contextual strategies, guides and reports

The summary above identifies several of the key contextual commitments that frame or inform the Taunton Waterways Strategy and Guidance but, with the exception of the TSFAIP does not reference flood alleviation strategies. These are referenced within the Management and Maintenance Plan that is

summarised in Section 6 and included in full as Appendix B.

Other relevant documents include but are not limited to:

- The emerging Mobility Strategy, prepared by WSP
- Taunton Local Cycling and Walking Infrastructure Plan
- Connecting our Garden Communities
- Somerset Rights of Way Improvement Plan
- Somerset Cultural Strategy
- Local Transport Plan
- Taunton Heat Network Masterplanning and Early Feasibility Study
- Somerset Tree Strategy

These emphasise the point that the Taunton Waterways Strategy is part of a continuum of evolving information and should be used in that context, being both informed by existing information and informing the production of emerging and future reviews and strategies.



Town Bridge

4 Spatial Planning and Character Areas

The geographical focus for the Taunton Waterways Strategy is predominantly along the River Tone within and around the town centre, extending upstream to Silk Mills Road (A3065) and downstream to the M5. Between Firepool Weir and the M5, the Waterways also include the Taunton and Bridgwater Canal.

The relationship between the town, river and canal is generally less defined by what happens on the water and more by the activity around the water and hence reference to ‘Waterways Corridor’ (as opposed to simply ‘waterways’) in this Strategy, referring to the adjoining and nearby land that benefits, or could benefit, from a strong interaction with the river and canal.

Beyond that definition, the geography of the Strategy extends further to address the tributaries that flow through many of the town’s neighbourhoods into the Waterways Corridor, and the footpath and cycle links that connect the communities to the Corridor through the town’s green wedges and interacting

with the tributaries. Still further out are the upstream and downstream parts of the River Tone catchment which have an enormous influence on all aspects of the water corridor through the town. So, whilst the Taunton Waterways Strategy is primarily focused on the river and canal, it necessarily addresses wider considerations.

4.1 Functional areas

In order to effectively communicate that geographic spread and to best understand the varying challenges, opportunities and interactions across the whole geography, the Strategy identifies three key Functional Areas which form the basis for mapping and planning.

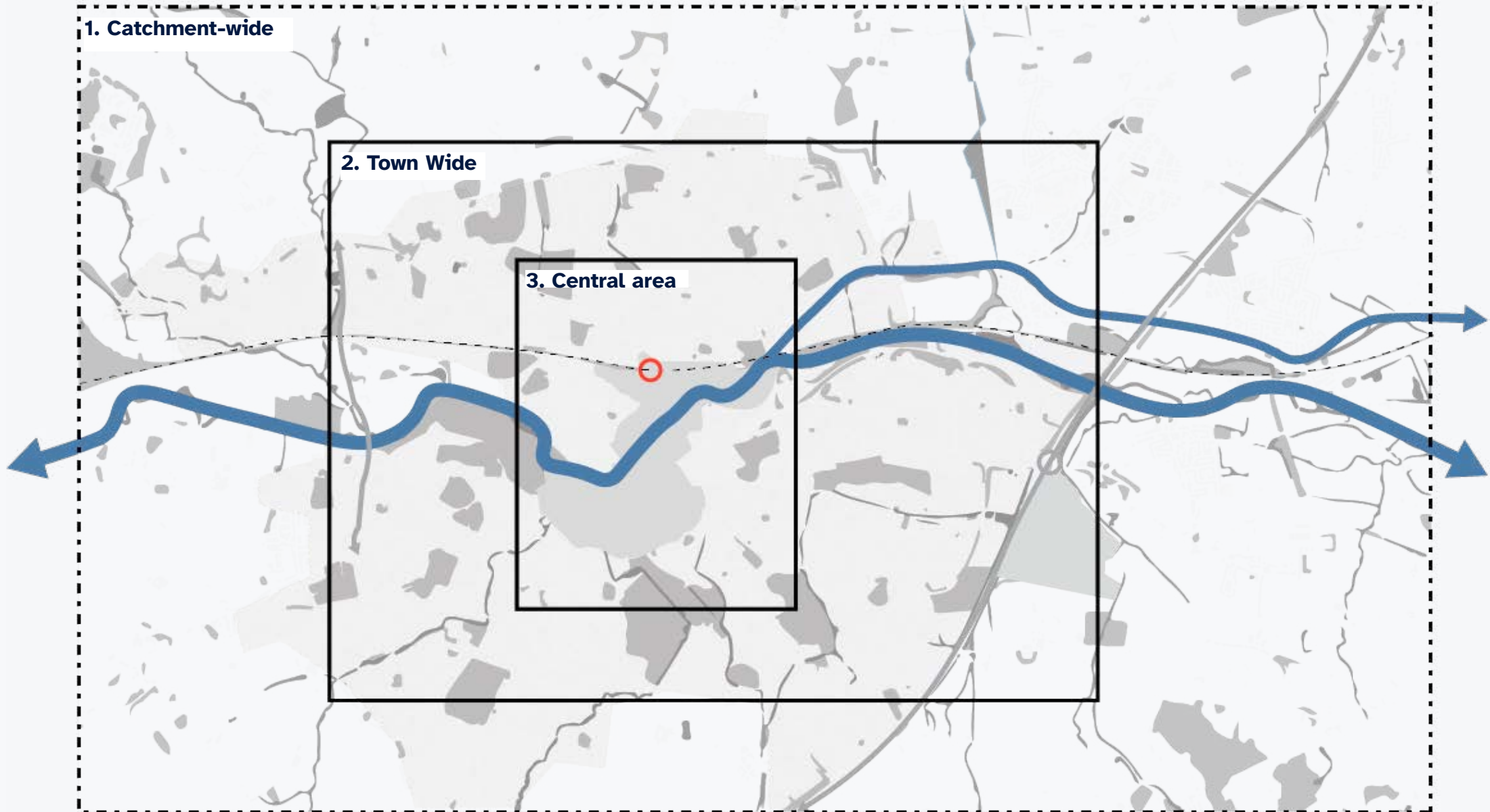
The Functional Areas are:

1. **Catchment-wide:** the wider river catchment that extends upstream and downstream beyond Taunton’s settlement boundary. The wider river catchment lies beyond the defined

scope of this Waterways Strategy but, owing to its importance to the conditions of the water within the town, it is necessarily referenced and key issues and opportunities are recorded

2. **Town-wide:** the river and canal extending from Silk Mills Road in the west to the M5 in the east, with connections through the town’s neighbourhoods through green wedges and associated tributaries. Linear issues and initiatives that apply to the whole of the water corridor are included. The corridor is sub-divided into seven **Character Areas** reflecting their individual attributes, qualities and potential
3. **Central area:** the water channels and waterside extending from French Weir to the west of the town centre, eastwards to Firepool Weir, encompassing three of the Character Areas. The river is an integral part of this central urban area which is rich in culture and history and yet the urban form is not particularly focused on the water as a placemaking asset

Diagram showing the three Functional Areas



The Central area includes the numerous potential brownfield redevelopment sites for which design guidance is provided, and three of four identified project clusters are within the Central area making this the area in which the most substantial change is anticipated to occur.

The Taunton Waterways Strategy is intentionally 'high-level', aiming to identify opportunities and facilitate collaborative working towards achieving the wide-ranging positive Outcomes from Investment. As such, it does not provide detailed guidance or precise definition and costing of potential investments.

It sets out:

- overarching principles for opportunities that are not site-specific
- waterways-specific principles for each Character Area and
- site-specific guidance for identified redevelopment sites

4.1.1 Relevant catchment characteristics

Details of relevant catchment characteristics are summarised below:

- The river is 63km long with an average gradient of 1 in 130. The total catchment area is approximately 385 sq km² (148 sq miles)
- The River Tone drains land from 14 main sub-catchments (including three reservoirs) as defined in the South West River Basin District,
- The overall Catchment is semi-rural but includes the urban areas of Taunton and Wellington, the main railway line serving the South West and a section of the M5
- Multiple watercourses flow into the River Tone through Taunton; Mill Leaze, Lyngford Stream, Sherford Stream, Galmington Stream, Blackbrook, Taunton Mill Stream, Allens Brook, Priorswood Stream, Maidenbrook Stream and Kingston Stream
- The catchment and land-use has historically been permanent pasture, arable and sheep and cattle grazing and woodland
- Fluvial flooding in the Upper Tone is relatively limited. This reflects the relatively small and steep watercourses which dominate the area. Recent flooding in this sub-area has been strongly driven by local surface water problems, exacerbated by some farming practices which have increased field run-off locally
- Downstream of Wellington, flood risk is primarily along river corridors within a defined floodplain made worse by some farming practices which can increase runoff. Functioning floodplains provide a natural storage area with very little modification to the River Tone itself. Some villages, such as Hillfarrance, benefit from a Flood Alleviation scheme

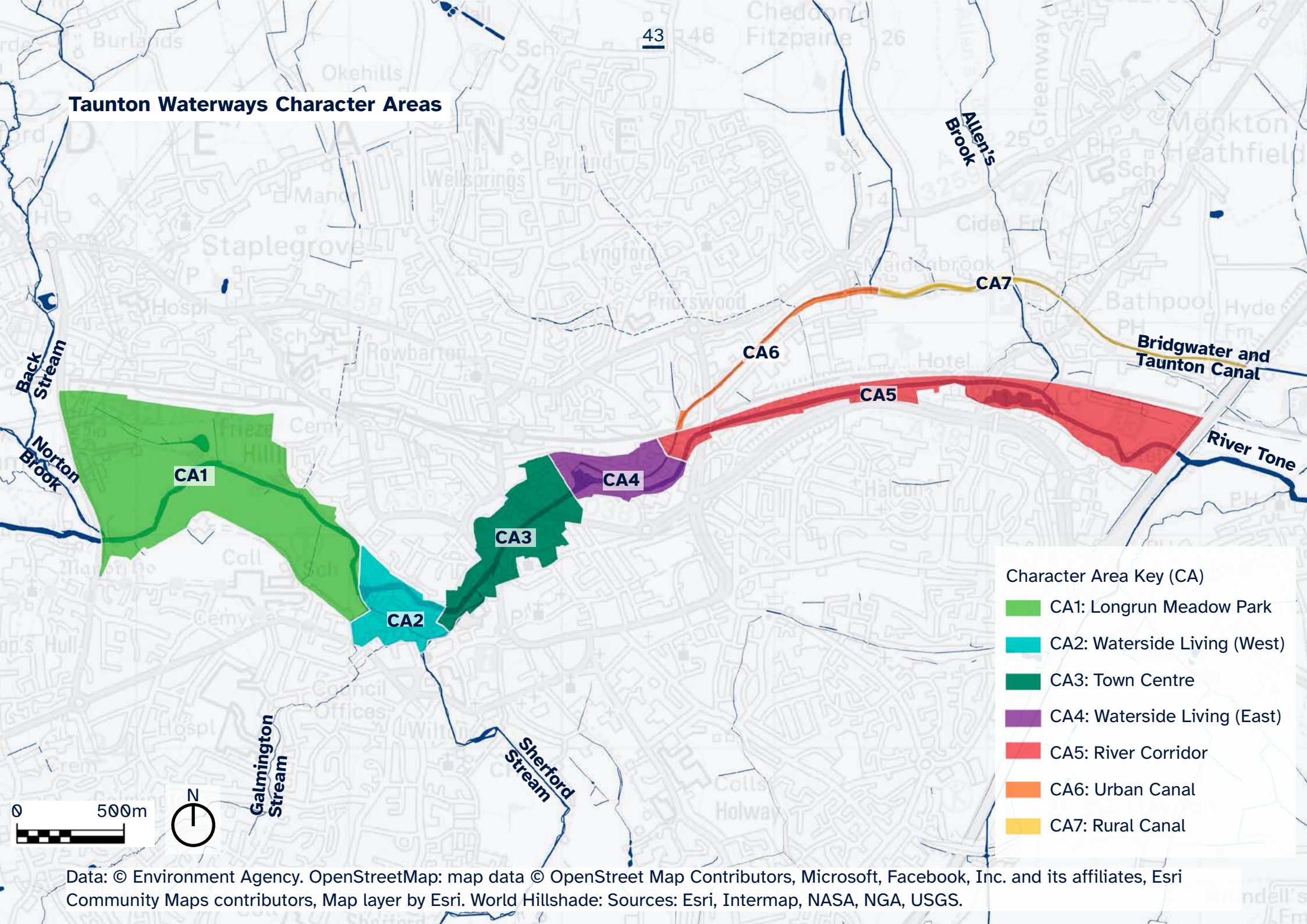
- Historically flooding in Taunton has been dominated by the River Tone. The 1960 flood event was reported to have flooded nearly 500 properties in the town. In response to this flooding the Taunton flood defence scheme was constructed in the 1960s and the scheme was further upgraded in the 1990s. Since the scheme was built in the 1960s there have been no major flood events in Taunton although the defences were tested in October 2000
- Most of the remaining flood risks in Taunton are related to tributary flooding. It is a fast-responding catchment with very little water storage due to artificial modification of the watercourse and adjacent floodplain. The risk of flooding has also increased by the loss of alternative waterways and storage in the valley floor, growth on the riverbanks and loss of capacity due to silting from agricultural practices
- Canalisation and culverting of some tributaries has also increased flood risk as crucial floodplain storage has been lost over time. Blockage risk is increased within the urban areas due to rubbish being discarded
- The Taunton and Bridgwater canal is 23.33km (14.5 miles) in length, passes through the unique lowland areas of Somerset, many parts of which have been designated as Sites of Special Scientific Interest. The canal became one of the first canals to commercially carry water when Wessex Water needed more capacity during the summer months (Durleigh Reservoir). Wessex Water reached a commercial agreement with the then National Rivers Authority (now the Environment Agency) and British Waterways to pump water from the canal to Durleigh
- The canal maintains its level with water from the River Tone at Firepool Lock, which is its link to navigation of the River Tone

4.2 Character areas

The Strategy and Guidance divide the main river channel into 7-character areas:

- CA1: Longrun Meadow Park: (including Park Ride)
- CA2: Waterside Living (West): (French Weir Park + Tangier allocation site)
- CA3: Town Centre (including Firepool, Morrison, Goodland Gardens and Cricket ground sites)
- CA4: Waterside Living (East): (in the vicinity of Firepool Weir)
- CA5: River Corridor
- CA6: Urban Canal
- CA7: Rural Canal

Taunton Waterways Character Areas



Character Area Key (CA)

- CA1: Longrun Meadow Park
- CA2: Waterside Living (West)
- CA3: Town Centre
- CA4: Waterside Living (East)
- CA5: River Corridor
- CA6: Urban Canal
- CA7: Rural Canal

Data: © Environment Agency. OpenStreetMap: map data © OpenStreet Map Contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri. World Hillshade: Sources: Esri, Intermap, NASA, NGA, USGS.

4.2.1 CA1: Longrun Meadow Park

Character

- Expanse of large open fields with blocks of trees and hedgerows and some limited agricultural fields.
- Character is predominantly meadow – informal, recreational, semi-natural space with community activity. It feels like a large community asset – plenty of paths and space for recreation.
- Paths connecting to the tree-lined river have a clear open meadow character, but the path under the trees connecting Roughmoor Close to French Weir Avenue feels intimate.
- The character area has an established riparian corridor along low river banks with clear views of the river.
- The park and ride at the northern-west edge of the character area is predominantly hard paving enclosed by semi-mature shrub and tree shelter belt edges.

CA1 covers a total area of 76 ha. Longrun Meadow including the area south of the river between Silk Mill Road in the west and French Weir in the east.

Silk Mill Park and Ride, which is a large area of hard paving, is in the northwestern corner of CA1. The Park and Ride (P&R) has 760 car parking spaces and is convenient for drivers coming from West Somerset and for people who need to get to Musgrove Park Hospital. It has a waiting room facility with toilets, but currently no other active travel offers such as e-bike hire or a small retail facility. It has the potential to become a new Mobility Hub at the entrance to the nature reserve with wayfinding information for pedestrian and cycle routes to Taunton town centre. A Public Right of Way across the site, from the P&R along the river past French Weir to the town centre. The meadow is well used by walkers, dog walkers, cyclists, and school children. Water sport activities include kayaking and wild swimming.

Surfacing around Longrun Meadow is variable, it can be muddy, stony and can

be difficult for commuters using the routes through this area into the town from the park and ride site. A well-surfaced and direct route into town would be helpful.

Adjacent to Taunton's railway line along the northern boundary is a small area of land allocated for development (industrial). Included in the character area is the Frieze Community Orchard in the North.

Longrun Meadow is a large public open space with open views across fields of arable crops and semi-improved grassland. As the land was formerly used for growing crops it is currently fairly limited in its range of plants.

The meadow is home to a large open barn providing a covered community space, a picnic area, and the Willow Cathedral. The park contains young clusters of woodland and Wetland habitat. There are two water storage areas located in the southern edge. The river running along the boundary on the northern edge of Longrun park breaks its bank during heavy rain and all the meadow can flood.

Off Silk Mill Road in the west is a small cluster of mixed -use development (including a nursery and fitness studio). There is restricted direct crossing over Silk Mills Road providing link to Nether clay park in the west. Somerset College of Arts and Technology and the Castle School are situated at the southern park boundary.

A Green Infrastructure (GI) link runs along the Northwest of CA 1, connecting the town and the Quantock Hills AONB to the north.



Site photos Character Area 1
Longrun Meadow

4.2.2 CA2: Waterside Living (West)

Character

- North and south have different characters.
- The north feels like a well planned urban area, mixing residential street with riverside green space that has urban parkland characteristics. There is predominantly positive interaction between the built form and the river corridor and green spaces.
- French Weir park is a large public civic open space surrounded by large mature specimens of London planes, horse chestnuts and oak trees, and there are open views of the southern river bank with dense vegetative growth.
- The south is much less organised and has little discernible urban form. It is dominated by highway infrastructure and large footplate buildings in car parks.
- There is currently a lack of positive relationship between existing development and the River Tone and Mill Stream.

CA2 includes the French Weir Park, the Tangier and Tesco site allocation area (Tg1, Tg2) west of the town centre. The combined CA2 area north and south of the river covers about 12 ha.

French Weir Park, adjacent to the River Tone is a small community park with play equipment, covering 2.4 hectares. The public open space is surrounded by large mature trees. The park includes a privately operated Weir café, which facilitates the Centre of Outdoor Activity & Community Hub (COACH), situated next to the French Weir. In the summer, the sports and canoe club TASC is based at the centre. It offers various water-based activities including kayaking, canoeing and stand-up paddle boarding with coaching and guidance. Recreation, both on land and water are of significance within this area.

The character area plays a key role in providing connections between Longrun Meadow and the town centre. As a neighbourhood park it is used by all ages and acts as an attractive through route between residential areas, shops, schools, and colleges.

The Tangier brownfield site is allocated development land, part of the Town Centre Area Action Plan (2008). The River Tone and Mill Stream run through the site, effectively forming an island.

The character area boundaries are the historic French Weir in the west and Third Way Bridge in the east. Over the French Weir structure runs a shared pedestrian and cycle link. The weir limits the potential for navigation along the waterways.

French Weir is part of the historic riverside setting. It was first built in the early 13th century when the mills in Taunton were reorganised, and the Castle Mill Stream was built. The weir was destroyed by flooding and rebuilt many times over the centuries. In the past the river around French Weir had become a popular place for bathing. Today a community of wild swimmers come together at French Weir, although swimming is not always safe due to the poor water quality (contaminated water run offs due to rising water levels).



French Weir public footpath



Tangier site



Site photos Character Area 2
Tangier Site and French Weir Park

French Weir cafe

4.2.3 CA3: Town Centre

Character

- This area feels like the margins of the town centre.
- The town centre abuts the river corridor here and the interface could be expected to be a vibrant focal point but instead the sense is that town centre is aware of its river but does not embrace or celebrate it.
- To the west of Town Bridge, there is plentiful vegetation and strong features which collectively convey historical character and relate well to Castle Green, but they do not feel connected to the core of the town centre. Town Bridge itself feels as if it is peripheral to the centre, rather than part of the town's heart.
- East of the bridge, the riverbank is a mix of hard engineered surfaces of brick, concrete, mud, and stone.

The character varies considerably, from the quite intimate retail feel of Riverside Place to the boldness of Coal Orchard, and then the dominance of the Cricket Ground (with its windowless facade facing the river) and the blandness of the supermarket and its car park. The intensity of the town centre bleeds quickly away.

- However, this is likely to be transformed by the Firepool development which will introduce a much stronger urban feel in the east of this character area, helping to frame the river and form a denser built connection with the town centre.
- There are some neglected spaces east of Coal Orchard, including the area under the bridges and the bandstand and riverside path next to Morrisons, and vegetation on the south bank appears unmanaged.

CA3 stretches east from Third Way Bridge to include the Firepool site in the east. It encompasses Goodland Gardens, the Somerset County Cricket Ground, the Wood Street site allocations, the Morrisons site and the Firepool site allocations (Fp1, Fp2) north of the river. The total combined CA3 area covers 22 ha.

The area has considerable historic character. Taunton Town Bridge is a landmark and most of the town centre area is designated as an Area of High Archaeological Potential. The Mill Stream at Goodland Gardens is a key heritage asset.

CA3 plays a key role in providing connections through the town centre and strengthening the relationship with the Firepool regeneration site. The Morrison site will be important in the future regeneration of the town centre (refer to Chapter 9 Design principles). Currently the urban landscape includes a series of fairly disconnected urban spaces north and south of the river. Pedestrian and cycle movement reaching the Town Bridge is interrupted.

The rear of the former Debenhams building is not well integrated with the river, Town Bridge or the historic Goodland Gardens.

The two redundant sluice structures in Goodland Gardens relate to the former town mill - an interesting focal point as a reminder of the importance of water to the town's evolution.

The riverbank east of the Town Bridge is a mix of hard engineered surfaces. The new planned Boulevard link at Firepool will connect the train station to the river edge and serve as an enhanced recreation location opposite the recently developed

Coal Orchard site adjacent to the Brewhouse Theatre. Taunton's independent quarter with courtyard spaces, restaurants, and shops create a vibrant ambience opposite the river.

The character area includes six bridge crossings. From River Tone Bridge in the west, the pedestrian footbridge at Goodland Gardens, Town Bridge in the Centre, the pedestrian bridge crossing between Morrison and the Brewhouse Theatre, Priory Bridge and the pedestrian bridge further east crossing over to the Firepool regeneration site.



Goodland Gardens
Photo credit: Stephen Craven



Coal Orchard



Town Bridge

Site photos Character Area 3

Town Bridge, Goodland Gardens and 'Rainbow footpath', and Coal Orchard

4.2.4 CA4: Waterside Living (East)

Character

- There is a distinct difference in character between the river and the canal. The canal water level remains constant, close to the footpath, with softened edges of reeds and irises, with a backdrop of small trees and shrubs, giving an appearance rich in vegetation. Whereas, the river edges are less accessible down a sloping bank with sparser vegetation.
- Firepool Lock provides an attractive, quiet, enclosed space surrounded by mature hedgerow trees with obvious historic features.
- The northern and southern banks of the canal and river respectively are paralleled by housing of sufficient scale to frame the waterways corridor, giving it a clear waterside living character.
- The character is positively influenced by Children's Wood, which has naturalistic, informal parkland qualities, and the established trees on the southern side which diminish the visual presence of the Priory Fields Retail Park.
- The Trenchard Way flyover obviously affects character and there is neglected space immediately beneath it, but its impact is tempered by the qualities of the waterside context.

CA4 includes the section from Firepool Weir to Obridge footbridge in the east. The total combined CA4 area covers about 12 ha.

The new housing scheme (Firepool Lock development) forms an attractive edge with direct frontage to the canal footpath. The remainder of the Firepool regeneration site is planned for significant development and a masterplan was adopted by the Council in 2023. It is envisaged that the weir will become a focal point for this development (refer to Chapter 9 Design principles).

Adjacent to Firepool Weir is the Grade II listed Pumphouse, a brownfield site with the potential to become incorporate a public hub as a destination for visitors to the town centre. The building currently has consent for conversion into a public house and restaurant although this has not been implemented. It fronts onto the canal and the canal road towpath. The access bridge over Firepool Weir is unsafe and the public footpath (PRoW) over the weir is currently closed. Most sluice gates are inoperable and in poor condition.

The river and canal diverge before the weir. In contrast to the canal, the river edges are inaccessible down a sloping bank with sparser vegetation. The canal footpath is used both by pedestrians and cyclists. The concrete bridge of the A307 connects the north and south of the river for vehicles.



Canal housing development



Firepool regeneration site



Pumphouse

Site photos Character Area 4
Firepool Lock development and Pumphouse
at Firepool Weir

4.2.5 CA5: River Corridor

Character

- The relatively straight river channel east of Obridge, and the parallel footpath, trees and vegetation, give this area the feel of a long, informal riverside park, albeit with few features. The river edge is softened by a small margin of reeds, grasses and small willow trees. There is only limited access to the river and only a few crossing points.
- The trees soften the visual effects of the railway and adjacent uses and the area has surprisingly rural quality. However, that is tempered by the rail and traffic noise and the engineered river.
- Further east, the character become more rural owing to the adjacent fields and broader woodland planting.

CA5 includes the section of the river between Obridge footbridge in the west and the M5 in the east. The rail line runs along north of the river. Part of this section of the river corridor is a local nature reserve.

The total combined CA5 area covers about 36 ha. The total length of the river from Obridge footbridge to the M5 is about 2.3 km.

The trail between Children's Wood in the west up to Hankridge Nature Reserve in the east is good for walking and running. The PRoW runs along both sides of the river. There is limited opportunity to cross the river at the western end at Children's Wood, making a crossing above Firepool Weir desirable.

The river edge is softened by small margin of reeds, grasses, and small willow trees. River corridor planting is of native willows, alders, and other wet habitat trees along with scrub, wet grassland, and marginal reed. From the bottom of the grassy embankment there are open views of the river.

Hankridge Nature Reserve's attenuation basin is deeply enclosed with trees with limited access to the river. The river corridor is a tranquil place, only the busy motorway forms a noisy boundary edge.



River Corridor
Photo credit: Derek Harper



Children's Wood
Photo credit: Steven Craven

Site photos Character Area 5
River Corridor at Obridge footbridge and
Children's Wood

4.2.6 CA6: Urban Canal

Character

- The canal here has a semi-urban character as if on the edge of town and is influenced by industrial estate and traffic noise
- Yet it feels traditional, being tightly contained by industrial units separated only by well established hedgerows for the most-part, with some industrial plots being more obviously exposed.
- With the exception of the canal, towpath and bridges, the sense of tradition is not reflected in built heritage or architecture which is modern and functional.

CA6 runs through industrial areas east of Taunton including Priorswood Industrial Estate. The National Cycle route goes along the footpath on the southern edge of the canal alongside the industrial units.

The CA6 area (through the industrial zones) has a length of about 1.2 km.

The industrial units turn their backs onto the canal. There may be an opportunity to improve overlooking by providing some more active frontage facing the canal over time.

The towpath along the whole length of canal provides a 10-mile level path across the Levels to Bridgwater connecting the moors to the town.

The canal is used by water sport activities, such as kayakers. The canal is crossed by the A307 bridge and Ventury Way bridge. Tall vegetative screening is included on both banks of the canal, the northern edge consists of some mature trees.



Urban canal

Photo credit: Richard Webb



Industrial units along the canal

Photo credit: Richard Webb

Site photos Character Area 6

Industrial units along the canal



Rural canal housing

4.2.7 CA7: Rural canal

Character

- Despite still being within the outer reaches of the town, this length of canal has a tranquil, rural feel that suggests being on the open countryside.
- Adjacent development has a village character.

CA7 runs through the suburban and rural parts in the east, with a village character. The rural canal in this Character Area has a length of about 1.6 km.

The pedestrian swing bridge at Bathpool connects the neighbourhoods over the canal further east and is well used by children as a route to school.

Canal mooring west of the swing bridge include narrow boats & small yachts.

This part of the rural canal has footpaths on both sides. The properties along the canal change between different boundary

treatments, from fences to hedgerows to open views along the canal.

The area has open, expansive views of sky and arable fields to the north. A variety of farm building architecture are located further east. M5 traffic noise is audible at the eastern extent of the character area, reducing the tranquillity and interrupting the more rural experience of this part of the canal.

Monkton Heathfield development allocation is located northeast of CA7. The area adjacent to the canal is identified in planning policy as a multi-purpose 'green necklace' surrounding the future settlement, providing allotments, outdoor recreation, and wildlife habitat with public access (Refer to chapter 5 Opportunities).



Bathpool Mooring
Photo credit: Tony Atkin

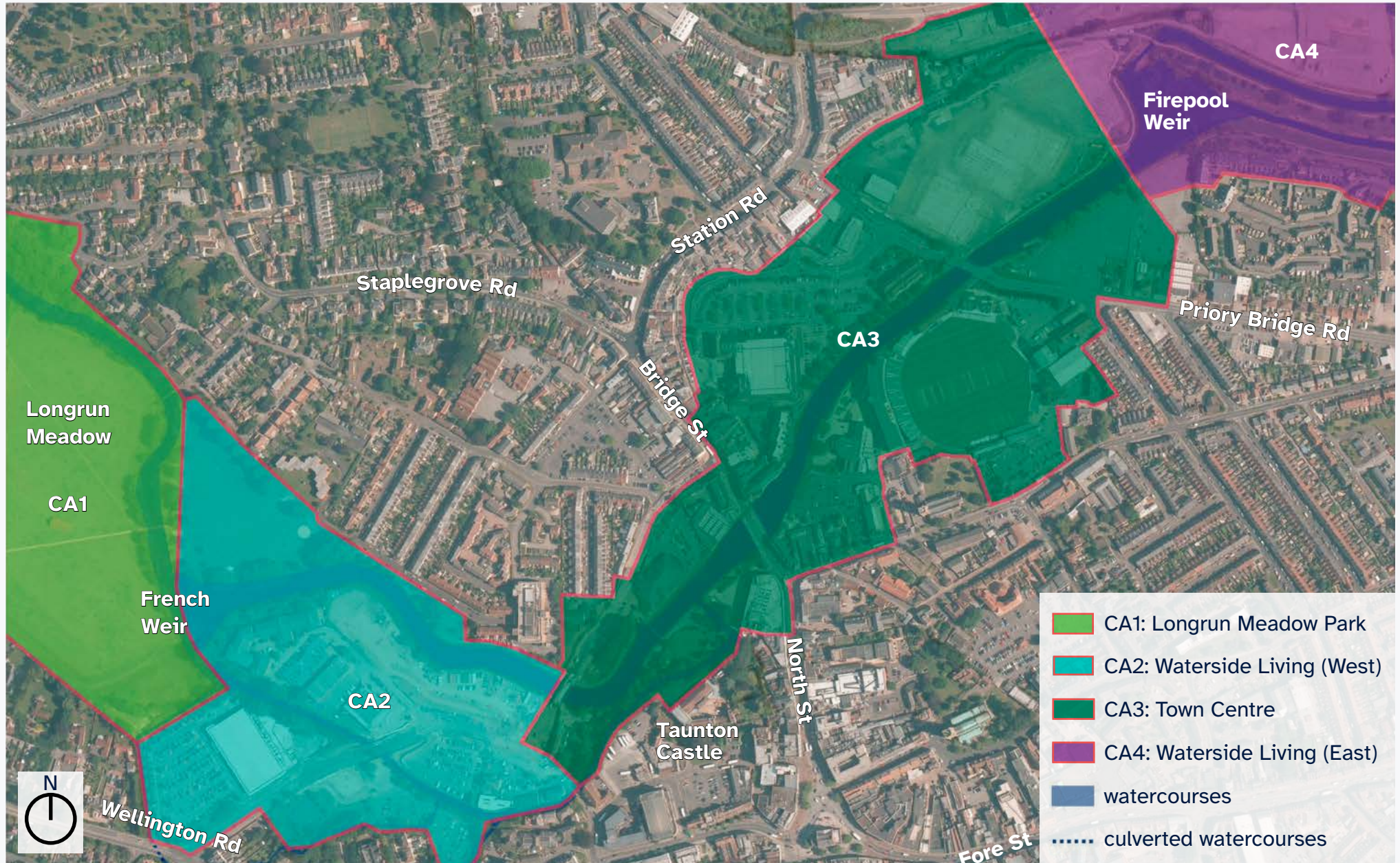


Rural canal edge

Site photos Character Area 7

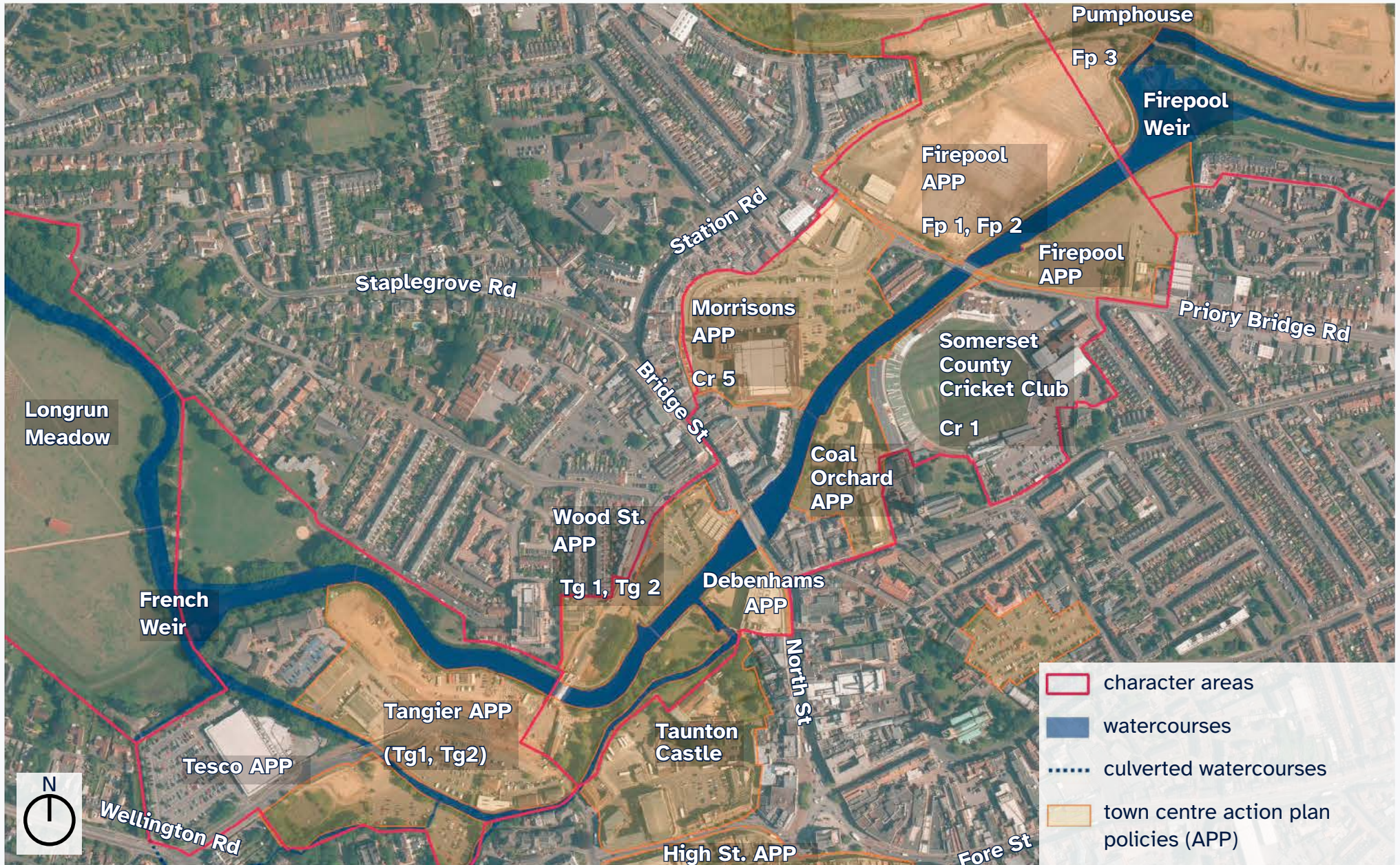
Bathpool Mooring and land adjacent to the canal as part of Monkton Heathfield development

Character areas in Taunton Town Centre Area



Aerial Photography - World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN and the GIS User Community. World Hillshade: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS User Community.

Identified development sites in Taunton Town Centre Area Action Plan 2007



Aerial Photography - World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN and the GIS User Community. World Hillshade: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS User Community.

5 Issues, Challenges and Opportunities

Section 5.0 is structured to set out issues and constraints at the catchment-wide and town-wide scales, and the opportunities for those functional areas, followed by issues, constraints and opportunities for each of the Character Areas.

Annotated basemaps in this section show locations for planned projects in specific Character Areas, and opportunities are marked with a code on the annotated basemap in section 5.3.

5.1 Catchment-wide and Town-wide: Key issues and constraints

High level issues and constraints of relevance to the catchment and town-wide functional areas are identified below, with reference to the following themes where appropriate:

- river channel movement
- flood risk management.
- missing links
- collaboration
- loss of habitat and wildlife
- management
- contamination/Pollution (water quality)

5.1.1 Description and issues

- the catchment of the River Tone has an area of approximately 385km² and lies between the Quantock Hills, Brendon Hills and Blackdown Hills
- the River Tone and its tributaries and floodplain have been substantially modified by previous engineering works (artificial banks, water level control structures etc
- the land management and farming practices across the catchment have given rise to more sediment loaded surface water runoff ending up in the rivers, streams, and culverts
- the River Tone has been straightened and realigned in many places and the tributaries have been modified or culverted within urban settings to make space for development
- bridges and urban areas confine any lateral mobility and prevent the river naturally adjusting its course

- the river is poorly connected to the floodplain due to the presence of high banks (with footpath) disconnecting it from the lowlands to the northeast which limits its potential flood attenuation.
- the river flows into the area of the Somerset Levels and Moors downstream of the M5 motorway where it spills into low lying adjacent farmland prior to discharge to the Bristol Channel

Key Issues/Constraints (Present)

- the floodplain has historically been built on in many places
- silt loading from the upper catchments lead to calls for de-silting
- there is only reactive maintenance upstream of Taunton
- navigation and water travel routes through Taunton are hindered by raised bed level, water level control structures and low bridges
- lack of awareness of riparian responsibilities
- emerging understanding of implications of climate change but limited funding available

- blockage of outfalls to the River Tone
- agricultural runoff within the wider catchment has led to increased phosphates and nutrient input into the river, causing eutrophication and reducing water quality downstream
- conflicts between watercourse management requirements for biodiversity and other functions e.g. drainage and recreation
- habitat loss and degradation resulting from development and land management practices in the catchment including agriculture and flood management
- loss and fragmentation of supporting habitats in the wider catchment impacting the natural functioning of catchments and watercourse
- physical modifications to channels including weirs, culverts, flood defences and other structures affecting value of river corridor as habitat and movement resource for wildlife
- presence of legally protected species (including bats, otter and water vole) and associated potential constraints on proposals and management

- indirect impacts from adjacent land uses (including drainage, roads, industry and housing) including light pollution and disturbance reducing quality and functionality of watercourse habitats for wildlife
- presence of protected species may require pre-commencement surveys, mitigation licensing and method of works
- employ pollution-control measures during works

Key Issues/Constraints (over next 25 years):

- possible reductions in funding for reactive works
- long term maintenance and management of the riverbanks and tributaries
- siltation of the River Tone through Taunton
- impacts of climate change on the waterways, urban environment, flood risk and ecology
- ecological constraints on proposed enhancement works include potential presence of invasive non-native species and protected species

- land use pressure in catchment increasing importance of river corridor as habitat resource for wide range of species including invertebrates, bat, birds, otter and water vole
- increased spread of invasive non-native invasive species and plant and animal diseases impacting the diversity of habitats and species present
- climate change resulting in increased temperatures impacting the range and distribution of habitats and species present
- climate change resulting in lower river flows reducing dilution and dispersion of pollutants such as nutrients, and increasing eutrophication and algal blooms
- increased rainfall intensity increasing runoff of pollutants from land and frequency of storm overflows from combined sewerage systems
- potential for increased confusion over responsibilities unless guidance is provided

5.1.2 Management & Maintenance issues

- existing water's edge buildings may require current silt and water levels to be maintained to support them structurally
- silt movement poses a contamination issue (phosphates)
- watercourse required to be clear for effective flood conveyance which may not be compatible with enhanced biodiversity or structures built or moored in the water
- siltation of the River Tone through Taunton and canal limits navigation
- access to the river for maintenance is limited and building density makes it harder to access
- lack of waste disposal along the waterways (No litter bins between Hankridge Nature Reserve and Town centre)
- control the spread of Himalayan Balsam and other non-native invasive species

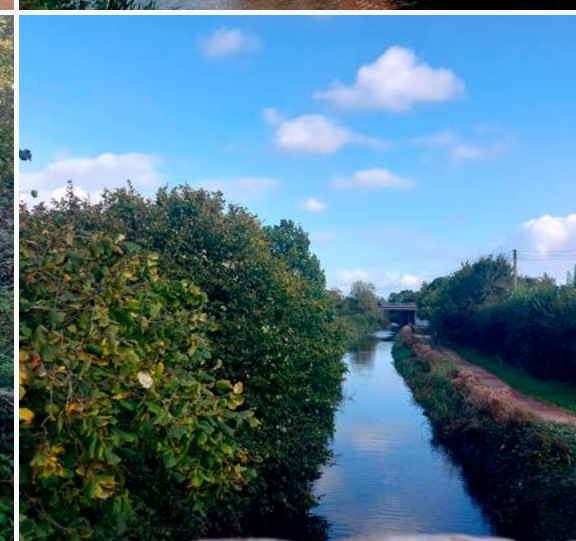
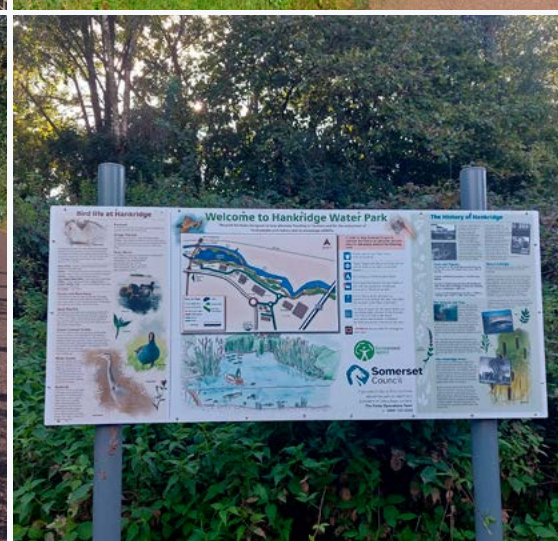
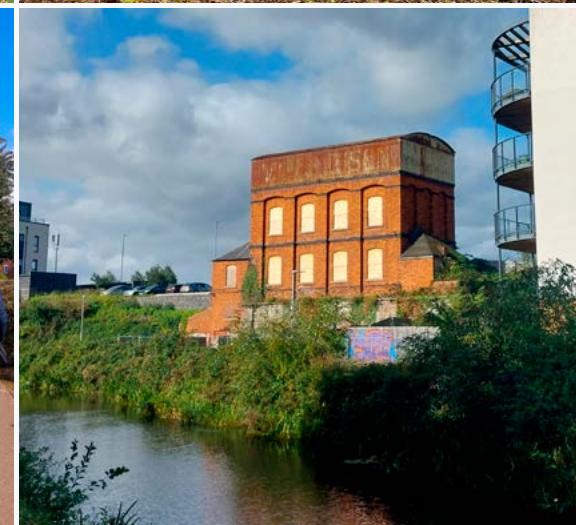
Refer to MMP report for more detail on Management actions indicated on base maps in the MMP report.

5.1.3 River channel movement / Flood risk management

- limited water depth for navigation in summer
- changes to river corridor would need thorough modelling before changes could be made
- if weir removal is proposed, consideration needs to be given to silt damage downstream and also potentially contaminated silt content

5.1.4 Public access

- gaps in access, surfacing and loss of connectivity
- lack of formal access for water users, fishing platforms, kayakers etc.
- missing links over the river



5.1.5 Loss of habitat / River channel movement and recreation constraints

- water level Control Structures required for navigation and ecology

5.2 Catchment-wide and Town-wide: Opportunities

A summary of the high-level strategic opportunities that have been identified along the Taunton waterways are provided below. These are based on a holistic understanding of the river and are intended to have multiple benefits for people and nature where possible. Opportunities are grouped according to key themes.

- Community Engagement
- Energy & Climate
- Habitat Creation & Wildlife
- Public Access
- Recreation and Culture

- Make space for water / slow the flow
- Catchment-wide opportunities

Community engagement opportunities

- public connection with Taunton's waterways- through engagement with local community and educational groups, including schools, friends of Longrun Meadow and friends of French Weir Park. Consult on strategic ideas and prioritised projects

Energy and climate opportunities

- opportunity to utilise the river for renewable energy and heating through hydropower and water source heat pumps. Only considered feasible if major landowner(s) engage as part of their decarbonisation strategy
- opportunities for large scale tree planting to manage water flow and deliver wider benefits including biodiversity enhancement and carbon sequestration

Rehabilitation of rivers and habitat creation through Biodiversity Net Gain

- opportunity for native tree planting, where possible in accordance with local strategies such as the Somerset Tree Strategy. (refer to PP 12)

Public access catchment opportunities

- opportunity to develop a targeted lighting strategy that facilitates public access whilst protecting species and habitats

Recreation and culture opportunities

- a network of routes that links communities with the waterways including Mobility Hubs and east-west from Longrun Meadow Park to Firepool Weir (Linear Water Park Concept / green corridor West to East)
- information boards showing history of the river and associated wildlife, protected species and habitats.



Make space for water/slow the flow opportunities

- W1 - Restore the floodplain (where there is connectivity and space).
- W1 - Wetland creation and storage upstream of Taunton will reduce peak volumes, reduce sediment loaded runoff reaching the river Tone, reduce nutrient/phosphate input and improve water quality and biodiversity across the catchment
- W2 - Utilise existing water storage areas more effectively to provide improved benefits for amenity and flood risk
- plant trees along flow pathways to slow the flow and reduce siltation. This will also enhance habitat diversity and connectivity within the riparian corridor for wildlife and protected species
- retrofit SuDS to relieve pressures on infrastructure and provide other multi benefits (water quality improvements, reduce nutrient input, amenity, wellbeing, biodiversity, heat reduction)
- opportunity for a formal navigation authority in place on the Tone

5.2.1 Planned Projects

There are several Taunton strategic flood alleviation improvements projects planned (reference Taunton Flood Risk Management Strategy 2019/2020)

Listed per priority order:

- Longrun Meadow - optimise water storage, increasing the storage capacity to remove excess water from the river, controlling when it floods and when that water is released back into the Tone through new embankments, inlet and outlet structures
- raised / new defences on the Tangier Tributaries and the River Tone (left bank) from Frieze Hill to Town Bridge
- raise Firepool Lock gates, increase the height of the defences between Firepool and Obridge (left bank)
- a new pumping station at Bathpool
- river restoration and flood storage at Vivary Park
- upstream storage at Bradford on Tone

- raising Castle Street Bridge & Bus Station Footbridge
- Mill Stream flow diversion

Additionally:

- Hills to Levels Project / Highways Referrals (FWAG) - Hills to Levels is a holistic catchment management approach across catchments in Somerset, aiming to 'slow the flow' to reduce flood risk, reduce erosion, improve water quality, deliver wider environmental benefits and increase resilience on the floodplain. Through land management there is a reduction of sediment loaded runoff onto the highway
- Wellington Waterways Project (Somerset Council) - 2024 - proposes a vision for reducing flood risk to key heritage assets of Tonedale (Tonedale Mill and Tone Works), and wider Wellington, alongside delivering wider benefits for nature and the community. The enhancement of existing attenuation features brings flood risk benefit

- Surface Water Management Plan (Wessex Water / Somerset Council) -2025 – approach to managing surface water across the county and potentially influence policy decisions - identifies various flood risks and outlines the preferred surface water management strategy to mitigate these risks
- Asset Database Project (Somerset Council) -2024 - single source that maps and understands all of the water assets which require inspection and maintenance across the county
- SuDS Inspectors Monitoring and Mapping (Somerset wide – SRA)- Existing SuDS schemes on developments, monitoring their effectiveness following implementation and mapping where they all are. Inspection of SuDS at various points during their construction by a SuDS Inspector provided by Somerset Council and funded by Somerset Rivers Authority
- Local Nature Recovery Strategy -2024 - The Somerset Local Nature Recovery Strategy (in prep) will set local priorities for nature recovery and identify opportunities for co-ordinated action to achieve those priorities
- Tree Cover Project across Catchment, including Somerset Tree Strategy – A ten-year plan to enhance and protect Somerset trees and woodland. Somerset Tree Strategy (2023) sets out how Somerset’s treescapes can embrace ecology, climate, community and how the county can manage and protect its existing and future trees.
- Cycleways Strategy Plan - Connecting safe cycle pathways across the town and to public transport
- Development at Bridgwater Tidal Barrier includes a requirement to improve fish passes upstream including at Firepool and French Weir
- Renovation planned to Somerset spacewalk - a sculpture trail model of the Solar System, displaying a model of the Sun and its planets in their proportionally correct sizes and distances apart
- Opportunity for engagement with Homes England who may be able to unlock potential of difficult to deliver sites
- Potential for innovative development, such as buildings on stilts, to unlock difficult development sites

5.3 Character Area 1: Longrun Meadow Park

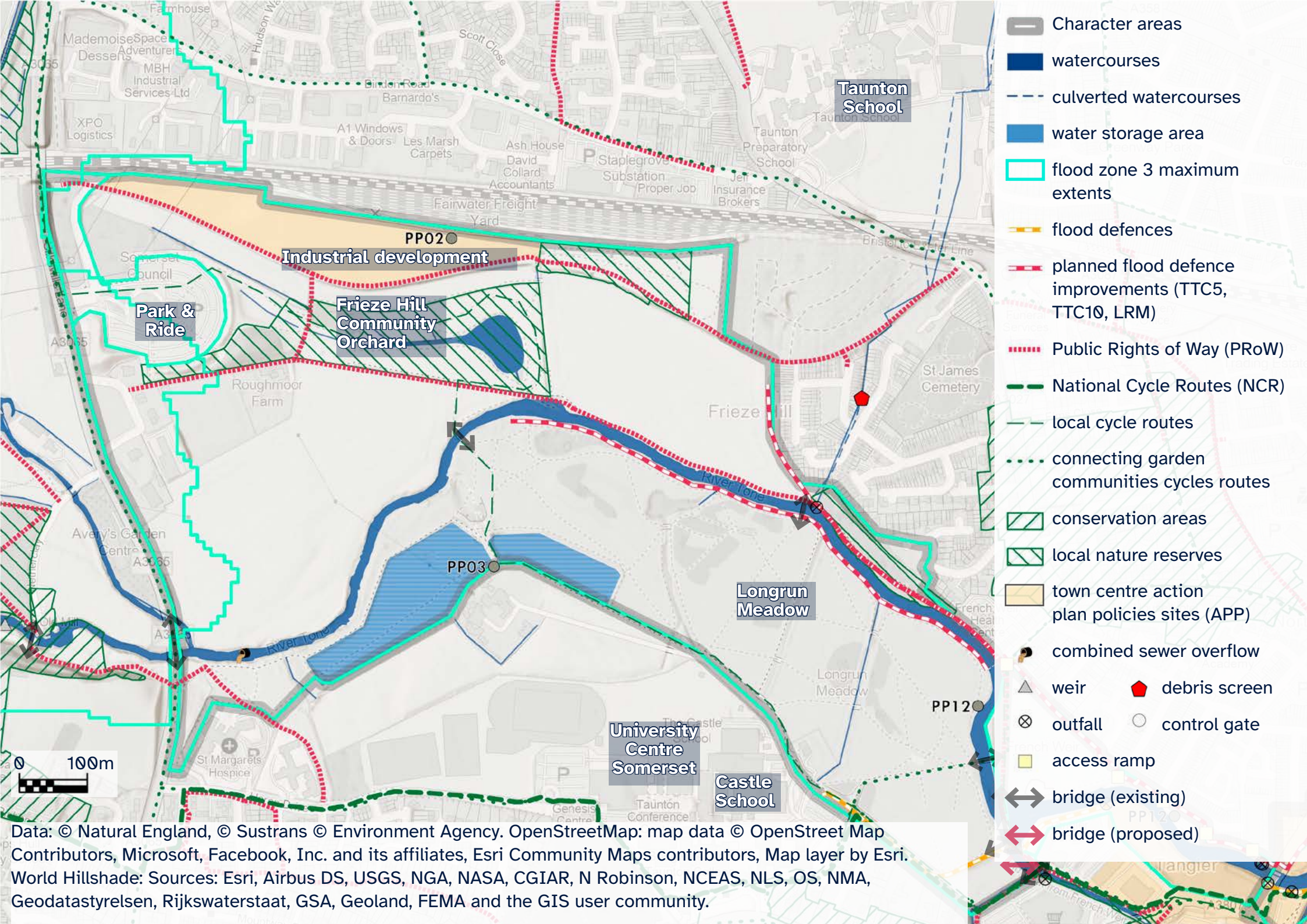
The river is poorly connected to the floodplain due to the presence of high banks (with footpath) disconnecting it from the wetland to the south. This is one of the better areas for floodplain connection. This is an area that does not currently receive any planned maintenance due to limited flood risk. Riparian owners are usually asked to manage any maintenance requirements e.g., fallen trees. There are also some significant erosion issues which would benefit from planting to stabilise the banks.

Key Maintenance Issues/Constraints (over next 25 years) (Refer to the MMP)

- the Environment Agency will cease to maintain the water level control structures through Taunton (Firepool Weir/French Weir) as these are not flood management structures and therefore, will not be funded to provide this function
 - siltation raises bed level
 - French Weir Structure
 - climate change – too much water for short periods and not enough water for longer periods
 - access for maintenance is limited
 - bank erosion
 - culverted tributaries (north) prone to blockage and localised flooding
 - phosphates and potential contaminants within silt
 - securing ongoing access to the river for maintenance
- ecological constraints on proposed enhancement works include potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required
 - agricultural runoff in the wider catchment has led to increased phosphate and nutrient input into the river causing eutrophication and reducing water quality downstream

Planned Projects: PP02, PP03, PP12 (refer to plan)

- PP02 - Allocated development site (industrial) to the north of Park and Ride)
- PP03 - Flood Risk Management Project Planned (reservoir storage area)
- PP12 Opportunity for native tree planting, where possible in accordance with local strategies such as the Somerset Tree Strategy.



- Character areas
- watercourses
- culverted watercourses
- water storage area
- flood zone 3 maximum extents
- flood defences
- planned flood defence improvements (TTC5, TTC10, LRM)
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- conservation areas
- local nature reserves
- town centre action plan policies sites (APP)
- combined sewer overflow
- weir
- debris screen
- outfall
- control gate
- access ramp
- bridge (existing)
- bridge (proposed)

Data: © Natural England, © Sustrans © Environment Agency. OpenStreetMap: map data © OpenStreet Map Contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri. World Hillshade: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA and the GIS user community.

5.3.1 Character Area 1: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

The proposed Longrun Meadow water storage project (PP03) represents a major opportunity for investing in flood risk management in a way that delivers multiple additional benefits if a collaborative design and planning approach is adopted.

Community Engagement:

- CA01 - Opportunity to engage with and utilise local community and educational groups, including

schools, friends of Longrun Meadow and friends of French Weir Park

- CA02 - Reinvigorate 'Routes to the River Tone Project' (HLF), 2014-2017 / plan similar project again
- CA03 - Widen offer by Centre for Outdoor Activities French Weir Park, run by Taunton Adventurous Sports and Canoe Club (non-profit organisation). They offer various water-based activities including kayaking, canoeing and stand-up paddle boarding
- CA04 - Love your river campaign with engagement with large retailers such as Tesco's

Energy and Climate

- E01 - Opportunity to utilise the river for renewable and heating through hydropower and water source heat pumps

Make Space for Water/Slow the Flow

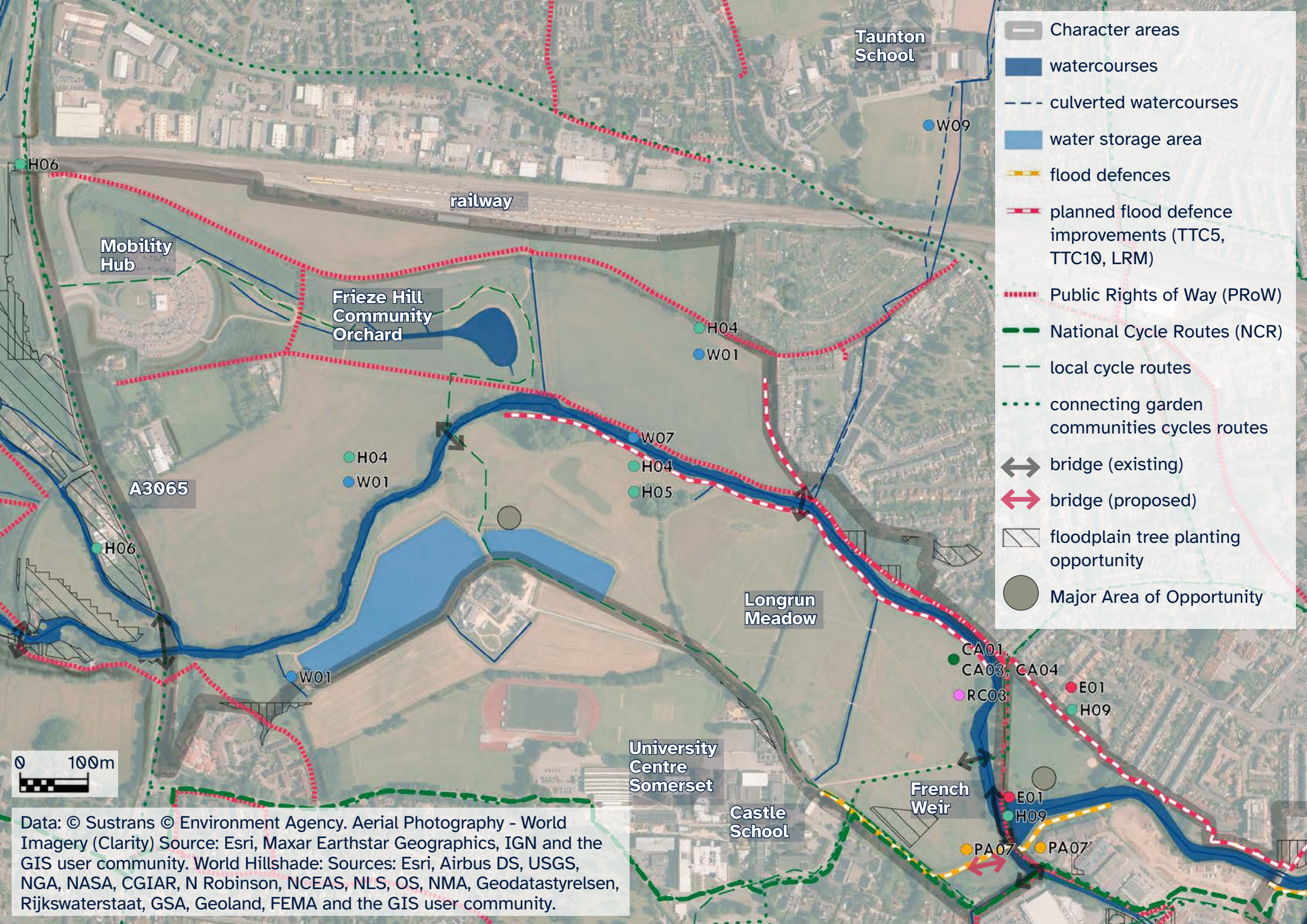
- W01 - Consider the use of adjacent land as this would enable further works with multiple benefits including channel enhancements (enhancing existing pool

and riffles and creating new ones by importing material). If land is available, assess opportunities to create some online and offline ponds with reed planting to offset road run off as well as phosphate stripping. This would also enhance habitat creation and connectivity within the riparian corridor for wildlife and protected species

- W07 - Opportunity for re-profiling of bank and creation of backwaters: to reduce flow and increase area for marginal vegetation, providing greater opportunities for invertebrates, amphibians, fish, otter and water vole.
- W09 - Opportunities for de-culverting watercourses

Public Access

- PA07 - New cycle bridge – opportunity for re-routing cycle route away from Marshalsea Walk (round the side of Tesco) via a new path along the top of the flood defences and a new bridge near the weir



- Character areas
- watercourses
- culverted watercourses
- water storage area
- flood defences
- planned flood defence improvements (TTC5, TTC10, LRM)
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- bridge (existing)
- bridge (proposed)
- floodplain tree planting opportunity
- Major Area of Opportunity

0 100m

Data: © Sustrans © Environment Agency. Aerial Photography - World Imagery (Clarity) Source: Esri, Maxar Earthstar Geographics, IGN and the GIS user community. World Hillshade: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA and the GIS user community.

Habitat Creation and Wildlife

- H04 - Opportunities for BNG habitat creation within Longrun Meadow, diversifying habitats on site and benefiting protected species: grassland enhancement; wetland creation; woodland and scrub planting
- H05 - Opportunity for the creation and installation of habitat structures for wildlife, including bird and bat boxes, reptile and insect houses
- H06 - Opportunity to create green links as recognised in the GI strategy and the Garden Town Vision document
- H09 - Provide improved fish pass at French Weir

Recreation and Culture

- RC03 - Amenity asset for recreation / lake feature

Water attenuation and biodiversity net gain





Tree planting and meadow planting



Wildlife habitat & walking routes



Interpretation and education



Access for watersport



Improved public access



Provision for cycling

Opportunities Longrun Meadow (precedents)

5.4 Character Area 2- Waterside Living (West)

Key Maintenance Issues/Constraints (Present)

- flood risk
- water level Control Structures required for navigation and ecology
- siltation of the River Tone through Taunton linked to water control structures, flow rates and channel size
- access to the river for maintenance is limited with urban landscape tucked close to the river edge
- differing opinion on levels of maintenance
- understanding of riparian responsibilities
- visual amenity – service pipes crossing the river and spaces beneath bridges
- navigation – silt bars and insufficient water depth
- lack of formal access for water users, fishing platforms, kayakers etc.

- light pollution onto riparian corridor from adjacent buildings, reducing effectiveness as a corridor for wildlife
- agricultural runoff within the wider catchment has led to increased phosphates and nutrient input into the river; causing eutrophication and reducing water quality down-stream

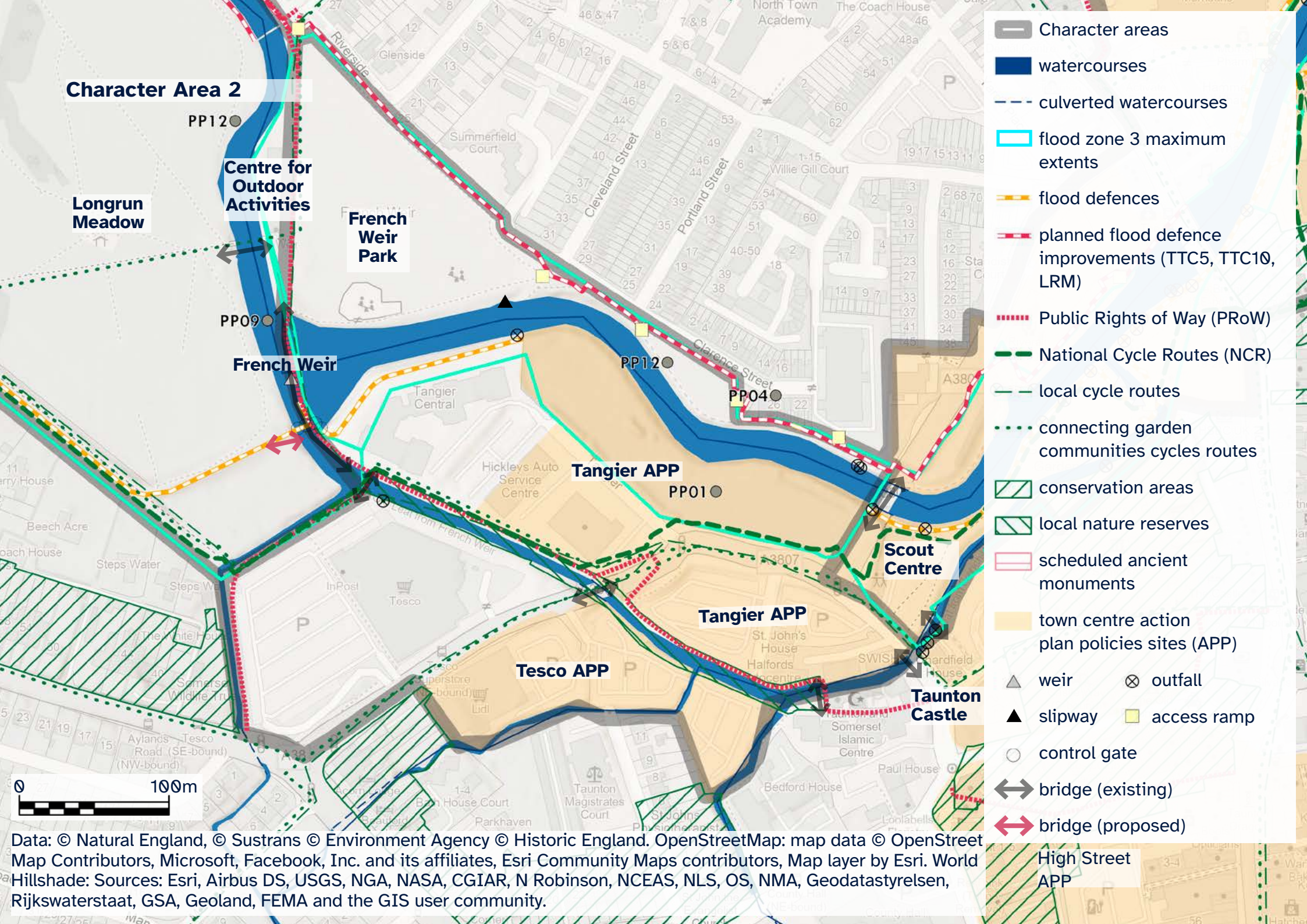
Key Maintenance Issues/Constraints (over next 25 years)

- The Environment Agency will cease to maintain the water levels control structures through Taunton (Firepool Weir/ French Weir) as these are not flood management structures, and therefore, will not be funded to provide this function
- maintenance of the riverbanks. Channel is engineered with hard defences (riprap) at the moment which requires regular inspection and remedial works where damaged
- siltation of the River Tone through Taunton
- climate change – too much water for short periods and not enough water for longer periods

- development of allocated sites along the water's edge
- dewatering / lowering of water levels could have consequences to waterside structures (stability)
- ecological constraints on proposed enhancement works include: potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required
- phosphates and potential contaminants within silt

Planned Projects:

- PP01- Land contamination on former industrial site (former gasworks, landfill site and Tangier) posing remediation issues.
- PP09 - Development at Bridgwater Tidal Barrier has a requirement to improve fish passages upstream including at Firepool and French Weir.
- PP12 - Tree cover project across catchment including Somerset Tree Strategy.



Character Area 2

PP12

Centre for Outdoor Activities

Longrun Meadow

French Weir Park

PP09

French Weir

PP12

PP04

Tangier APP

PP01

Scout Centre

Tesco APP

Tangier APP

Taunton Castle

- Character areas
- watercourses
- culverted watercourses
- flood zone 3 maximum extents
- flood defences
- planned flood defence improvements (TTC5, TTC10, LRM)
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- conservation areas
- local nature reserves
- scheduled ancient monuments
- town centre action plan policies sites (APP)
- weir
- outfall
- slipway
- access ramp
- control gate
- bridge (existing)
- bridge (proposed)



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High Street APP

5.4.1 Character Area 2: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

There is a significant opportunity at French Weir to plan and design collaboratively for its long term functionality, to continue to deliver water management requirements but also benefits related to biodiversity, connectivity and community awareness.

Community Engagement

- same as in Character Area 1

Energy and Climate

- E01 - Opportunity to utilise the river for renewable and heating through hydropower and water source heat pumps

Make Space for Water / Slow the Flow

- W05 - Ensure high-quality SuDS and water management on proposed development sites
- W09 - Opportunities for de-culverting watercourses

Public Access

- PA07 - New cycle bridge – opportunity for re-routing cycle route away from Marshalsea Walk (round the side of Tesco) via a new path along the top of the flood defences and a new bridge near the weir
- PA11 - Tesco site: continuous public access along the Mill Stream frontage, improvements to Marshalsea Walk along the northern site boundary and the footbridge over Mill Stream, provision for new pedestrian and cycle routes from Marshalsea Walk and French Weir
- PA12 - Mill Stream inlet - Make this structure more accessible
- PA19 - Opportunity for new riverside path between gas works (allocated with policy support)

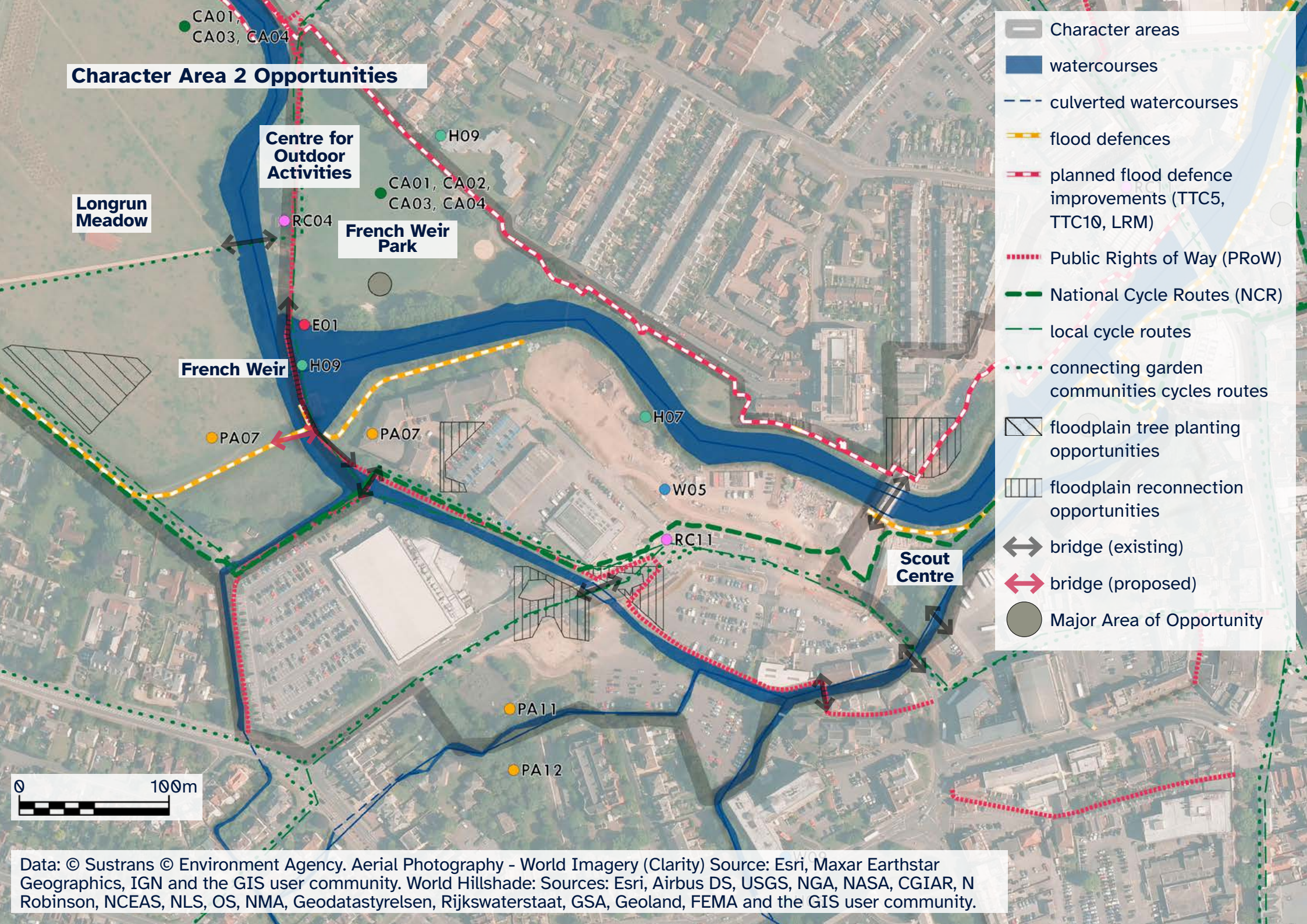
Habitat Creation and Wildlife

- H06 - Opportunity to create green links as recognised in the GI strategy and the Garden Town Vision document
- H07 - Retain, enhance, and reinstate the 8m riparian zone planting along watercourse edge. [for protected species (otter, water vole, bats). Potential for register the zone as BNG offset.]
- H09 - Provide improved fish pass (on both Firepool and French Weir)

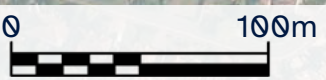
Recreation and Culture

- RC01 - Opportunities for events along the Waterways, including nature-focused riverside walks and linear park runs for example
- RC04 - New viewing platform over French Weir Park
- RC11 - Creation of multitude of green SuDS throughout new developments to give opportunities for community spaces and/or water play

Character Area 2 Opportunities



- Character areas
- watercourses
- culverted watercourses
- flood defences
- planned flood defence improvements (TTC5, TTC10, LRM)
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- floodplain tree planting opportunities
- floodplain reconnection opportunities
- bridge (existing)
- bridge (proposed)
- Major Area of Opportunity



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Rills and water play



Strong frontage overlooking water



Strong green corridors & tree planting



Positive relationship to water



Cafés and meeting places



Strong overlooking and green corridors.



Active travel routes alongside water

Opportunities waterside living (west), precedents

5.5 Character Area 3: Town Centre

Key Maintenance Issues/Constraints (Present)

- Siltation of the River Tone through Taunton
- Water level Control Structures required for navigation only plus ecology
- Access to the river for maintenance is limited due to development close to waters edge
- Differing opinion on levels of maintenance
- Understanding of riparian responsibilities
- Lack of formal access for water users, fishing platforms, kayakers etc.
- Onward navigation to the Canal hindered by siltation
- Firepool Weir sluice structures are inoperable
- Footpath is narrow past the cricket ground
- Light pollution onto riparian corridor from adjacent buildings, reducing effectiveness as a corridor for wildlife

- Water quality related to phosphates and nutrient input to the river upstream

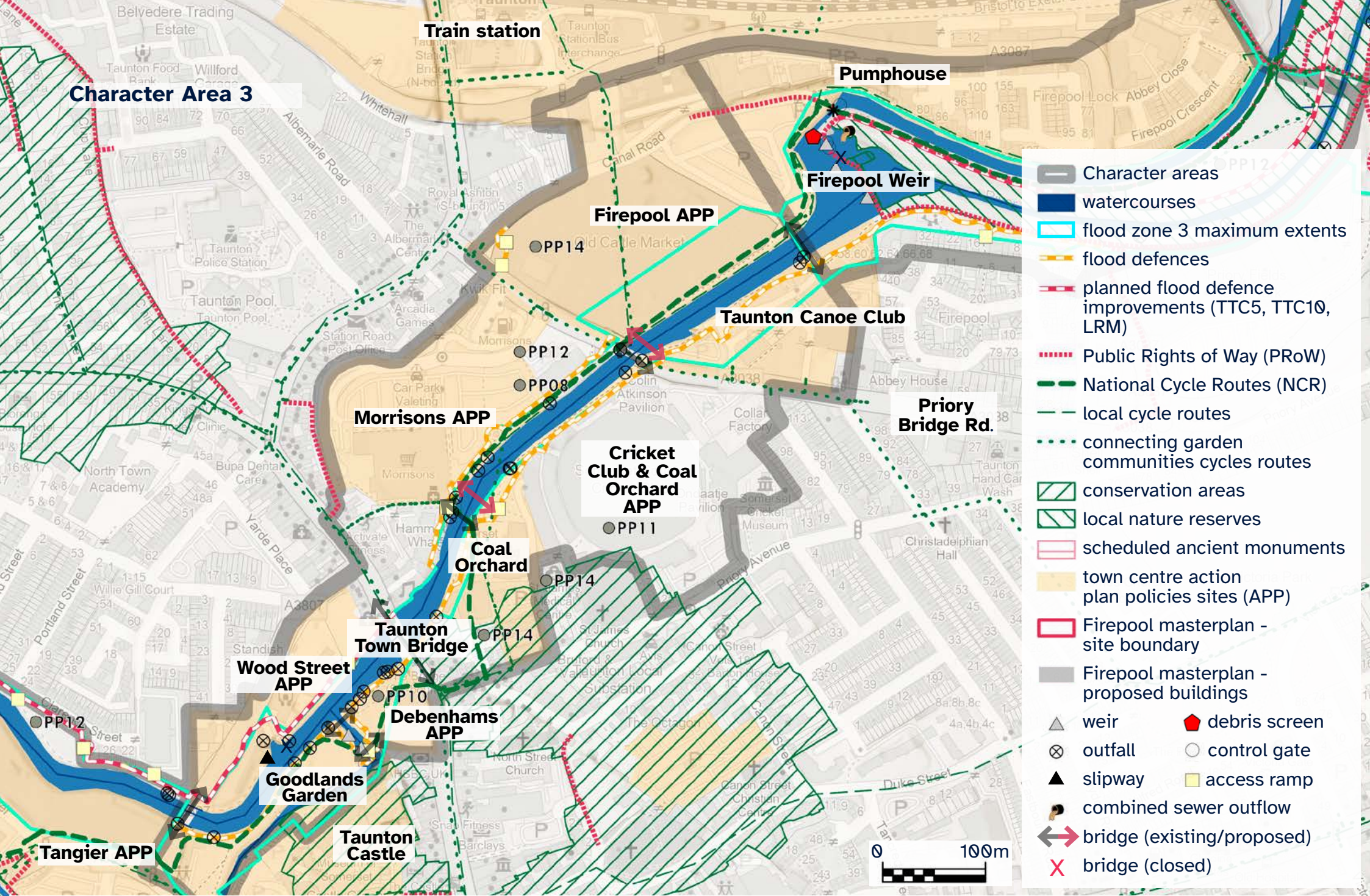
Key Maintenance Issues/Constraints (over next 25 years)

- The Environment Agency will cease to maintain the water levels control structures through Taunton Maintenance of the riverbanks. Channel is engineered with hard defences (riprap) at the moment which requires regular inspection and remedial works where damaged
- Siltation of the River Tone through Taunton
- Climate change – too much water for short periods and not enough water for longer periods
- Dewatering / lowering of water levels could have consequences to waterside structures (stability)
- Ecological constraints on proposed enhancement works include: potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required

- Phosphates and potential contaminants within silt

Planned Projects:

- PP08 - Cycleways are proposed in strategic plan but where practical should consider both walking and cycling/wheeling
- PP10 - Debenhams building (active frontage towards the water edge) – ideally turn building into a mixed-use development with entrances to waterfront – smaller retail units with residential on top
- PP11 - Cricket Club River proposal Policy Cr 1 (improvement to widening of riverside park and appropriate community use of new facilities)
- PP12 - Tree cover project across catchment including Somerset tree strategy.
- PP14 - Cycle hub at Firepool (proposed in new development) & cycle hub/ lockers proposed adjacent to St James Medical Centre, Coal Orchard.



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5.5.1 Character Area 3: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

The town centre provides three major areas of opportunity for deriving multiple positive outcomes from investment in and adjacent to the water: at Goodland Gardens & Mill Stream, Coal Orchard and Firepool Weir.

Community Engagement

- CA02 - Reinvigorate 'Routes to the River Tone Project' (HLF), 2014-2017 / plan similar project again

Energy and Climate

- E01 - Opportunity to utilise the river for renewable and heating through hydropower and water source heat pumps

Make Space for Water/Slow the Flow

- W03 - Digital information board supplying water quality data including flows etc. or a board with app details including measuring stations on the Tone
- W04 - Possible to narrow channel through Town Bridge to increase velocity and scour silt and create some planting. Continue this through the town centre area by creating a more sinuous channel. This could have dual benefits of improved ecology and improved navigation

Public Access

- PA06 - Morrison site: provide a direct route between the proposed Boulevard in Firepool and Bridge Street for pedestrians, cyclists, and public transport
- PA14 - Expand the narrow footpath - as part of investment in the Cricket Ground

- PA15 - Potential for a small Mobility Hub at Brewhouse Theatre
- PA18 - Improved Links between Firepool Boulevard and Bridge Street, the river and the urban fabric and the relation to between the future the development and the river
- PA23 - Replace the Goodland Gardens bridge and potential for floating commercial units adjacent to Town Bridge to the rear of the former Debenhams building

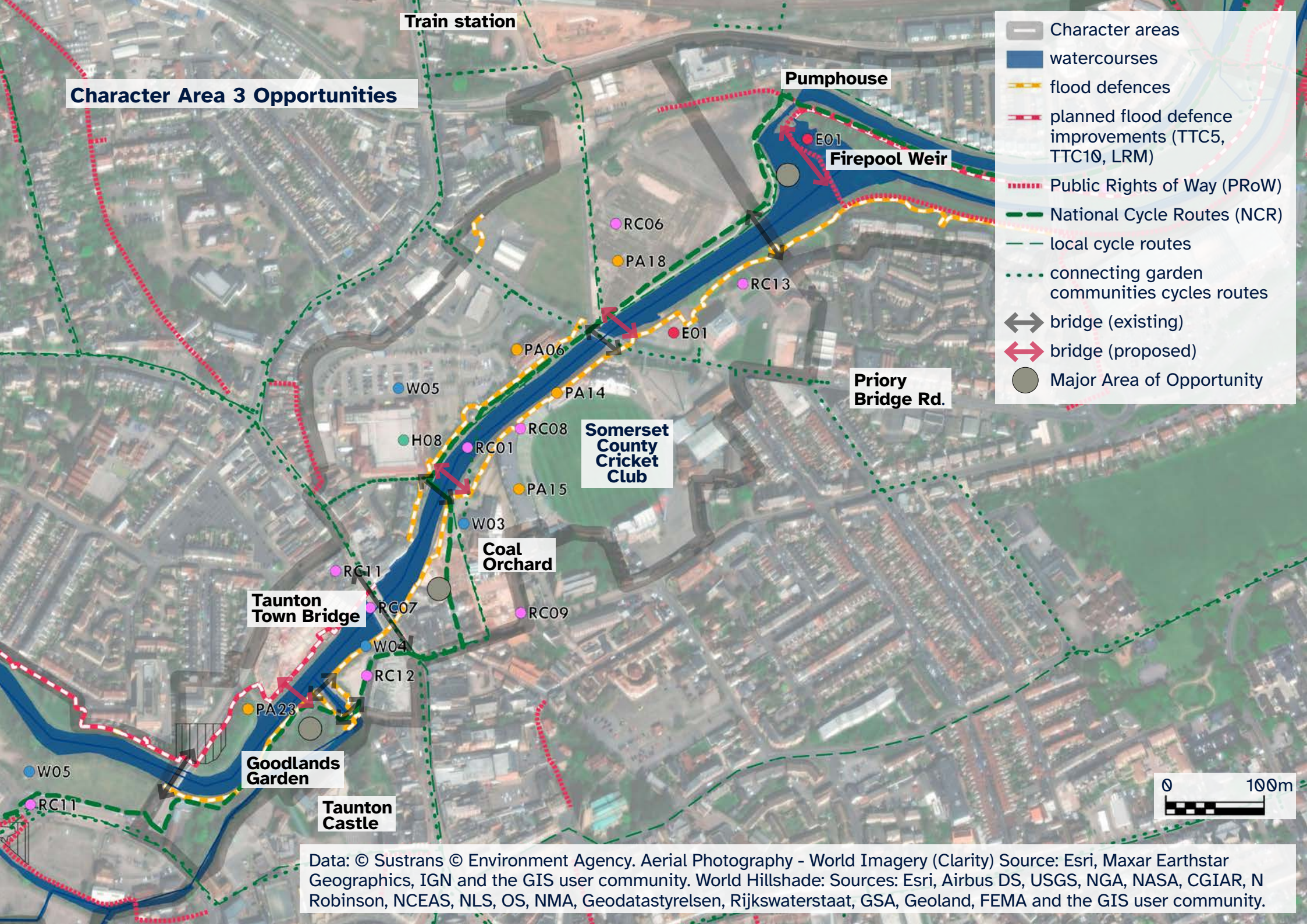
Habitat Creation and Wildlife

- H08 - Continue tree belt - river edge - in front Morrisons (relocate bandstand)

Recreation and Culture

- RC01 - Opportunities for events along the river, including festival events such as dragon boat racing
- RC06 - Firepool boulevard as a key pedestrian route and commercial area with new public square at the Riverfront
- RC07 - Taunton Town Bridge as a landmark building. Maintain views to the bridge

Character Area 3 Opportunities



Train station

Pumphouse

Firepool Weir

Priory Bridge Rd.

Somerset County Cricket Club

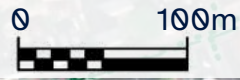
Coal Orchard

Taunton Town Bridge

Goodlands Garden

Taunton Castle

- Character areas
- watercourses
- flood defences
- planned flood defence improvements (TTC5, TTC10, LRM)
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- bridge (existing)
- bridge (proposed)
- Major Area of Opportunity



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- RC08 - Brewhouse Theatre of cultural importance to Taunton as a arts and performance venue, with potential for improvement and better relationship with River.
- RC09 - Coal Orchard is a key recreational site/ focus on events and future initiatives and offers an opportunity for a floating cafe or similar
- RC11 - Creation of multitude of green SuDS throughout new developments to give opportunities for community spaces and/or water play
- RC12 - Opportunity for pop up cafés / meanwhile uses along the waterfront
- RC13 - Retain and improve canoe club



Public spaces for all ages

Photo credit: Fredrik Larsson



Linear park along river



Retail opportunities in new development



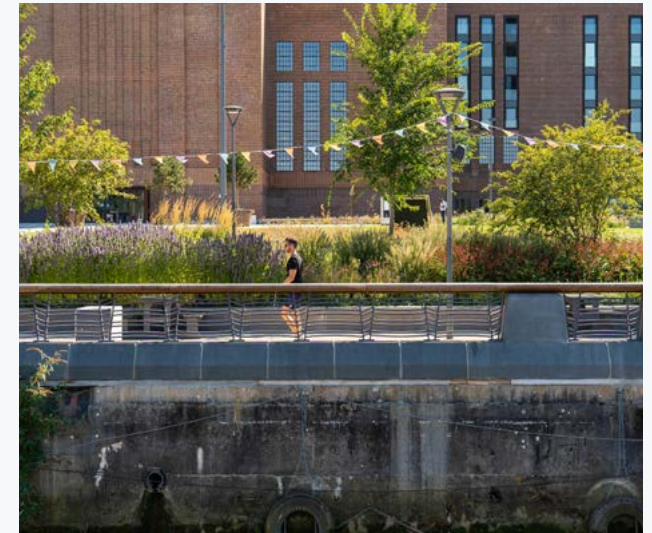
Active travel route & green spaces along river



Businesses alongside river



Water festivals and events



Improved access to the river

Opportunities town centre (precedents)

5.6 Character Area 4: Waterside Living (East)

Key Maintenance Issues / Constraints (Present)

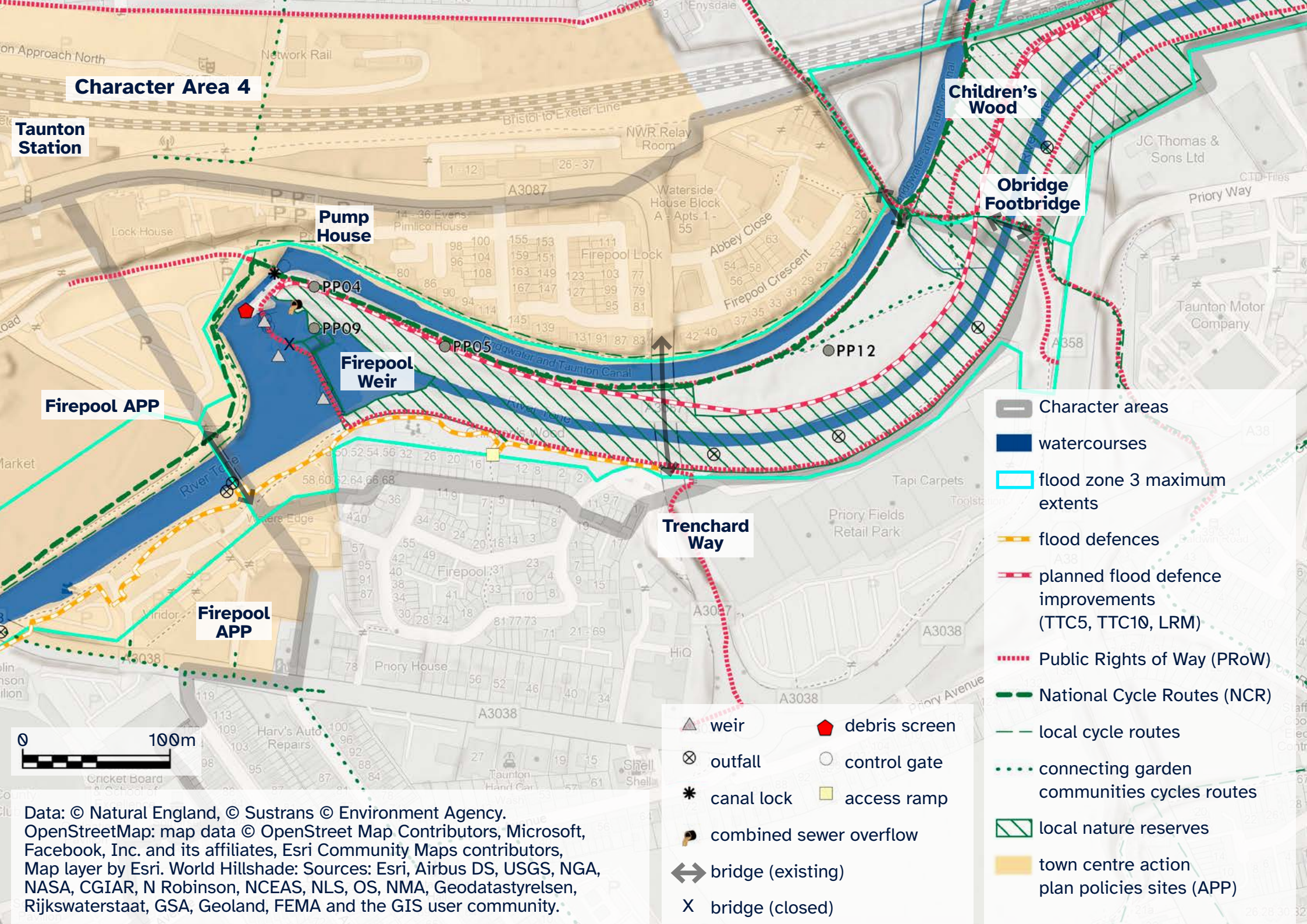
- Public Right of Way over Firepool Weir is closed off
- Siltation of the River Tone through Taunton
- Water level Control Structures required for navigation only plus ecology
- Access to the river for maintenance
- Differing opinion on levels of maintenance
- Understanding of riparian responsibilities
- Lack of formal access for water users, fishing platforms, kayakers etc
- Onward navigation to the canal hindered by siltation limited boat traffic
- Sluice structures inoperable
- Very steep access route up to Obridge / Canal walkway
- Public realm at Firepool- particularly along water edge, lighting, and lack of landscaping at water's edge.

- Light pollution onto riparian corridor from adjacent buildings, reducing effectiveness as a corridor for wildlife
- Water quality related to phosphates and nutrients upstream

Key Maintenance Issues / Constraints (over next 25 years)

- The Environment Agency will cease to operate or maintain the water levels control structures through Taunton (Firepool Weir / French Weir) as these are not flood management structures, and therefore, will not be funded to provide this function.
- Failure of the weir could be catastrophic in terms of ecology, phosphates release and flood risk
- Maintenance of the riverbanks. Channel is engineered with hard defences (riprap) at the moment which requires regular inspection and remedial works where damaged
- Siltation of the River Tone through Taunton

- Climate change – too much water for short periods and not enough water for longer periods
- Dewatering / lowering of water levels could have consequences to waterside structures (stability)
- Any proposed changes to the waterways need to be modelled to measure the impacts (refer to the Taunton strategic flood alleviation improvements projects planned (reference Taunton Flood Risk Management Strategy 2019/2020 and current Water modelling project (ongoing -2025)
- Canal heavily silted reduces its use for regular boat users
- Access for vegetation maintenance of the canal on the opposite bank to the tow path is by boat only
- Ecological constraints on proposed enhancement works include potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required



Opportunities to relate to historic buildings along the river

Planned Projects:

- PP04 - Firepool Sluice Gates Refurbishment Project (EA)
- PP05 - Raising the Flood Defences from Firepool Weir to Obridge
- PP09 - Development at Bridgwater Tidal Barrier has a requirement to improve fish passages upstream
- PP12 - Ecology enhancement including tree cover



5.6.1 Character Area 4: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

Investment is required in Firepool Weir and the lock, and proposals are emerging for redevelopment of the historic pumphouse. If planned collectively, this is a significant area of opportunity that would deliver multiple benefits for the town.

Community Engagement

- CA02 - Reinvigorate 'Routes to the River Tone Project' (HLF), 2014-2017 / plan similar project again

Energy and Climate

- E01 - Opportunity to utilise the river for renewable and heating through hydropower and water source heat pumps

Make Space for Water/Slow the Flow

- W05 - Ensure high-quality SuDS and water management on proposed development sites for any future proposals

Public Access

- PA01 - TTC10 flood defence may impede PRoW; current path is very steep near Winkworth Way, rerouting and mitigation needs to be thoroughly considered, as the footbridge is an active travel route
- PA13 - Improve the bridge over Firepool Weir to allow public access
- PA21 - Opportunity to cross the river at Children's Wood (raised walkways)

Habitat Creation and Wildlife

- H07 - Retain, enhance and reinstate the 8m riparian zone planting along watercourse edge. [for protected species (otter, water vole, bats). Potential for register the zone as BNG offset.]
- H09 - Provide improved fish pass (on both Firepool and French Weir)

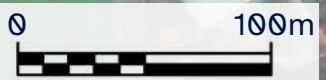
Recreation and Culture

- RC01 - Opportunities for events along the river, including child-friendly events such as rubber duck and paper boat racing
- RC10 - Pumphouse (Landmark building) Adjacent to Firepool Weir is the Grade II listed Pumphouse. The Pumphouse site is currently a brownfield site with the potential to create a focal point in the future

Character Area 4 Opportunities



Character areas	local cycle routes
watercourses	connecting garden communities cycles routes
flood defences	floodplain reconnection opportunities
planned flood defence improvements (TTC5, TTC10, LRM)	bridges (existing)
Public Rights of Way (PRoW)	bridges (proposed)
National Cycle Routes (NCR)	Area of Opportunity



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Pocket parks along river



Existing overlooking of the river



Potential for hydropower



Habitat creation



Active travel routes along the river



Interpretation along routes

Opportunities waterside living (east) precedents

5.7 Character Area 5: River Corridor

Key Maintenance Issues / Constraints (Present)

- The river area is a Nature Reserve
- Tree management
- Invasive Himalayan Balsam is unmanaged
- Consider flood risk to adjacent industrial estate
- Northern and Southern tributaries discharge into the river
- Agricultural runoff within the wider catchment has led to increased phosphates and nutrient input into the river; causing eutrophication and reducing water quality downstream

Key Maintenance Issues / Constraints (over next 25 years)

- EA likely to dispose of its landholdings – it is landowner. Limited opportunity for habitat enhancement / slowing the

flow along the banks here as priority is to remove water from Taunton as quickly as possible during flood events

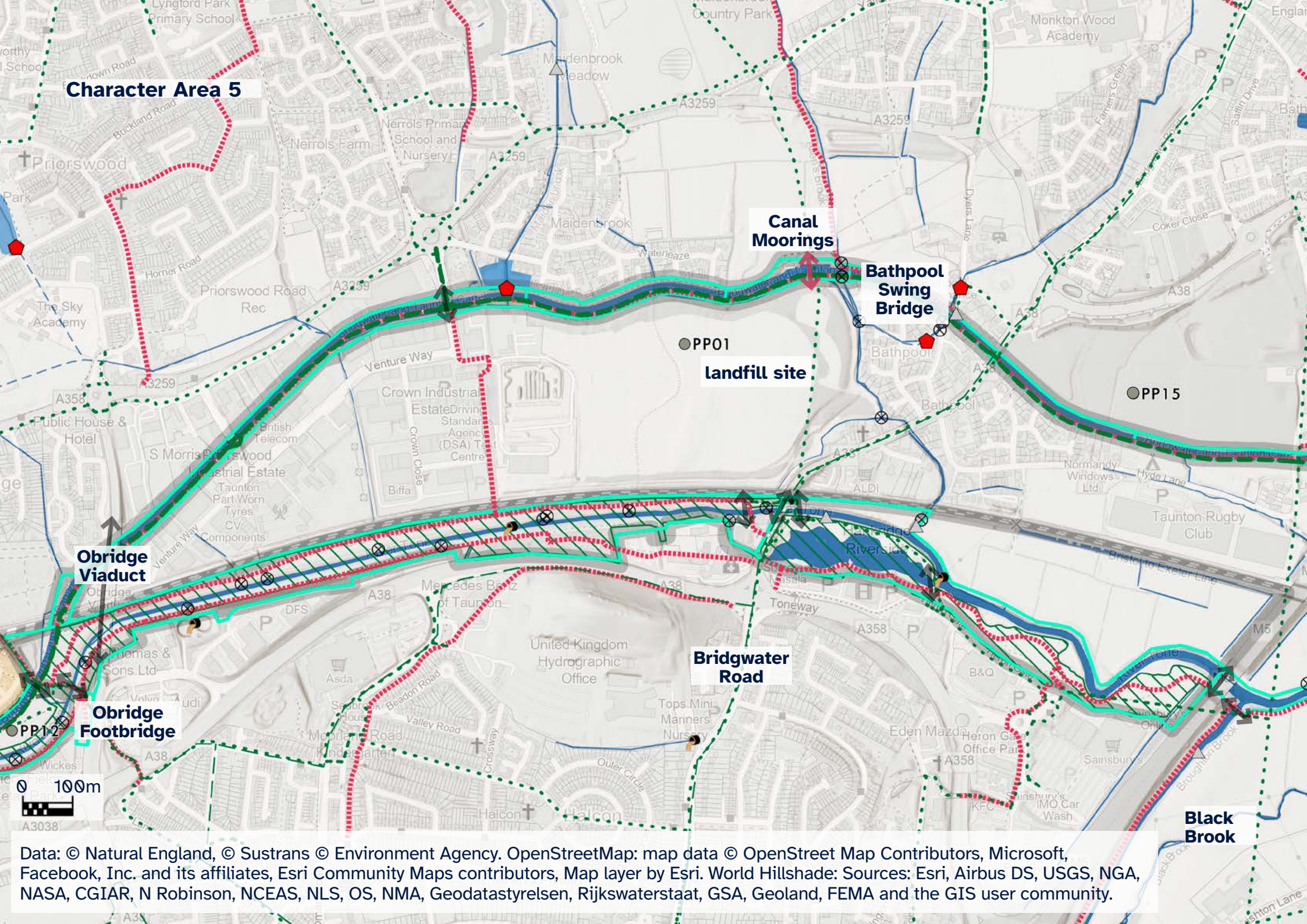
- Climate change – too much water for short periods and not enough water for longer periods
- Ecological constraints on proposed enhancement works include: potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required

Planned Projects:

- PP01 – Land contamination on former industrial site (Former gasworks, landfill site and Tangiers) - which has been capped off and is identified in policy as a community woodland opportunity
- PP15 Opportunity for access on previous racecourse land

Key

-  Character areas
-  watercourses
-  culverted watercourses
-  water storage area
-  flood zone 3 maximum extents
-  Public Rights of Way (PRoW)
-  National Cycle Routes (NCR)
-  local cycle routes
-  connecting garden communities cycles routes
-  local nature reserves
-  town centre action plan policies sites (APP)
-  weir
-  debris screen
-  outfall
-  combined sewer overflow
-  bridge (existing)
-  bridge (proposed)



Character Area 5

Canal Moorings

Bathpool Swing Bridge

landfill site

Obridge Viaduct

Obridge Footbridge

Bridgwater Road

Black Brook

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5.7.1 Character Area 5: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

Community Engagement

- CA02 - Reinvigorate 'Routes to the River Tone Project' (HLF), 2014-2017 / plan similar project again

Make Space for Water/Slow the Flow

- W06 - In channel improvements – very linear and straight. Improve existing small cascade weirs and put some sinuosity back in the channel. Include reed bed planting and small online ponds

- W07 - Opportunity for re-profiling of bank and creation of backwaters: to reduce flow and increase area for marginal vegetation, providing greater opportunities for invertebrates, amphibians, fish, otter, and water vole
- W09 - Opportunities for de-culverting watercourses

Public Access

- PA20 - Opportunity for public access on previous racecourse land
- PA21 - Opportunity to cross the river at Children's Wood (raised walkways)

Habitat Creation and Wildlife















- H01 - Potential presence of invasive non-native species
- H02 - Agricultural runoff in the wider catchment has led to increased phosphate and nutrient input into the river causing eutrophication and reducing water quality downstream

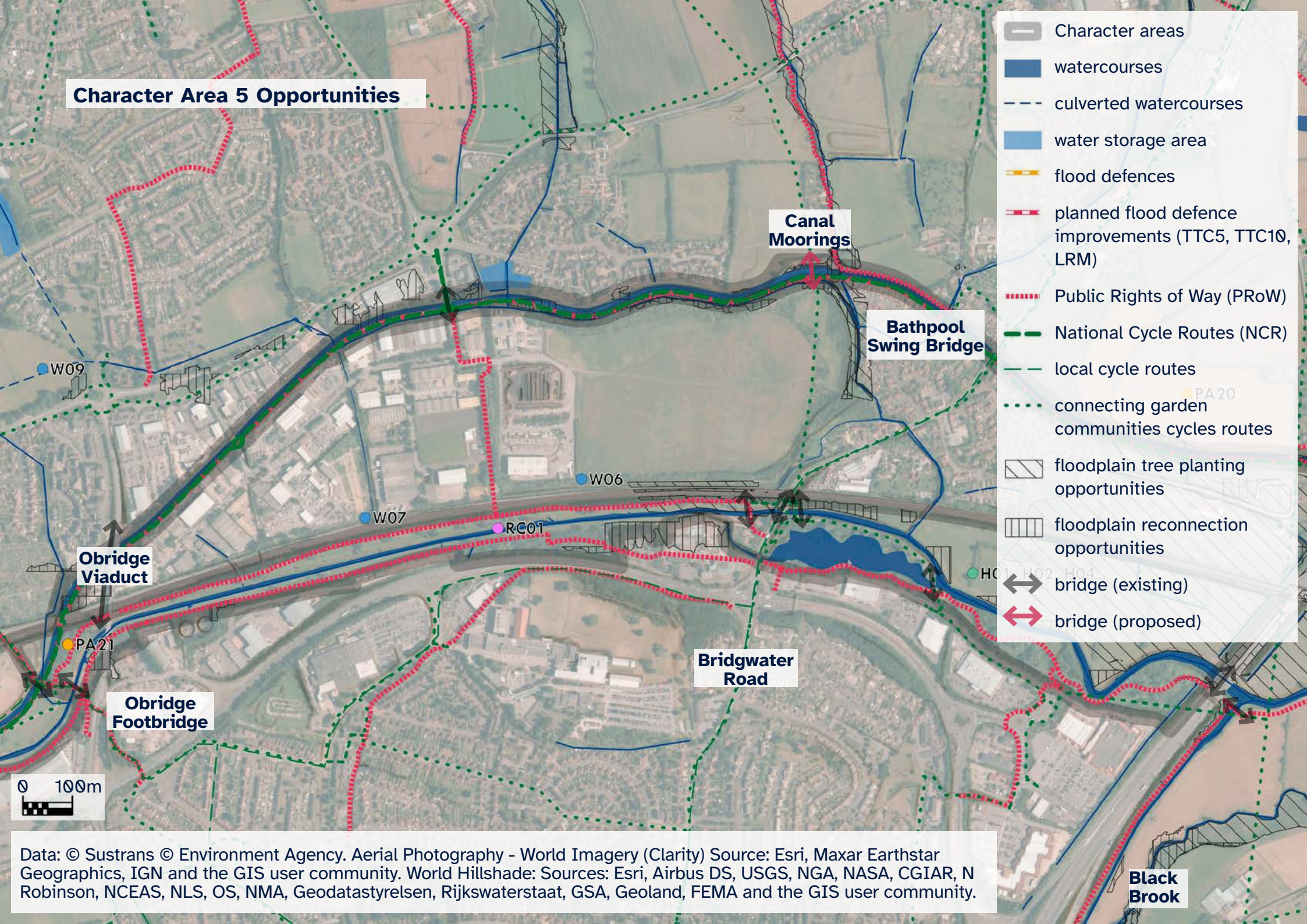
- H04 - Opportunities for BNG habitat creation. [diversifying habitats on site and benefiting protected species: grassland enhancement; wetland creation; woodland and scrub planting.]
- H06 - Opportunity to create green links as recognised in the GI strategy and the Garden Town Vision document

Recreation and Culture

- RC01 - Opportunities for events along the Waterways, including nature-focused riverside walks and linear 'park runs' for example

Character Area 5 Opportunities

-  Character areas
-  watercourses
-  culverted watercourses
-  water storage area
-  flood defences
-  planned flood defence improvements (TTC5, TTC10, LRM)
-  Public Rights of Way (PRoW)
-  National Cycle Routes (NCR)
-  local cycle routes
-  connecting garden communities cycles routes
-  floodplain tree planting opportunities
-  floodplain reconnection opportunities
-  bridge (existing)
-  bridge (proposed)



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Black Brook





Bank reprofiling



Improved cycle routes



Recreation



Events along the river



Habitat creation



Watersports

Opportunities river corridor (precedents)

5.8 Character Area 6: Urban Canal

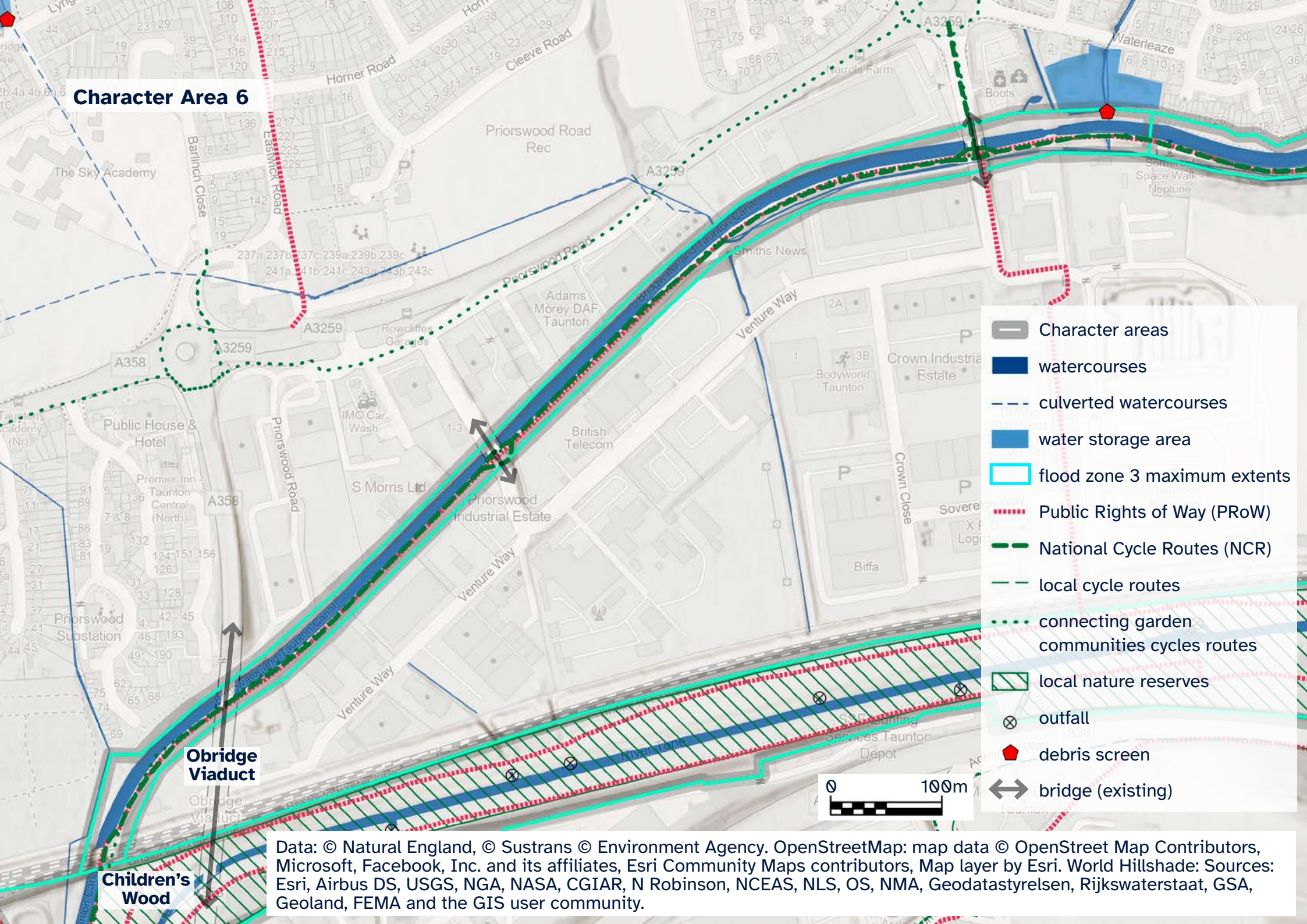
Key Maintenance Issues / Constraints (Present)

- Siltation raises bed level and limits navigation
- Offside vegetation clearance difficult (boat only)
- Lock gates and sluices
- Bridge crossings
- Boat numbers to ensure canal is viable.
- Footpath access
- Availability of water for navigation in summer
- Towpath surfacing and links and signage to it. Potholes, car parking locations/lack of access by public transport
- Agricultural runoff within the wider catchment has led to increased phosphates and nutrient input into the water, causing eutrophication and reducing water quality downstream

Key Maintenance Issues / Constraints (over next 25 years)

- Climate change – too much water for short periods and not enough water for longer periods. Over abstraction into canal – drought on tone
- Over development
- Increased footfall and usage of towpath causes a maintenance challenge for the Canal and River Trust
- Lock gates at Maunsel will need replacing in 2027
- Possible leaks at Standards Lock being investigated. May need funding
- Ecological constraints on proposed enhancement works include potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required

Character Area 6



- Character areas
- watercourses
- culverted watercourses
- water storage area
- flood zone 3 maximum extents
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- local nature reserves
- outfall
- debris screen
- bridge (existing)

Obridge Viaduct

Children's Wood

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5.8.1 Character Area 6: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

It would be beneficial to have a Recreational Strategy for the canal as the basis for coordinating investment over the longer term.

There is an opportunity to introduce more active frontage to the canal as industrial units to the south are gradually redeveloped over time. For example, office functions, canteens and break-out space could be positioned to relate more positively to the canal and towpath.

Community Engagement

- CA02 - Reinvigorate 'Routes to the River Tone Project' (HLF), 2014-2017 / plan similar project again

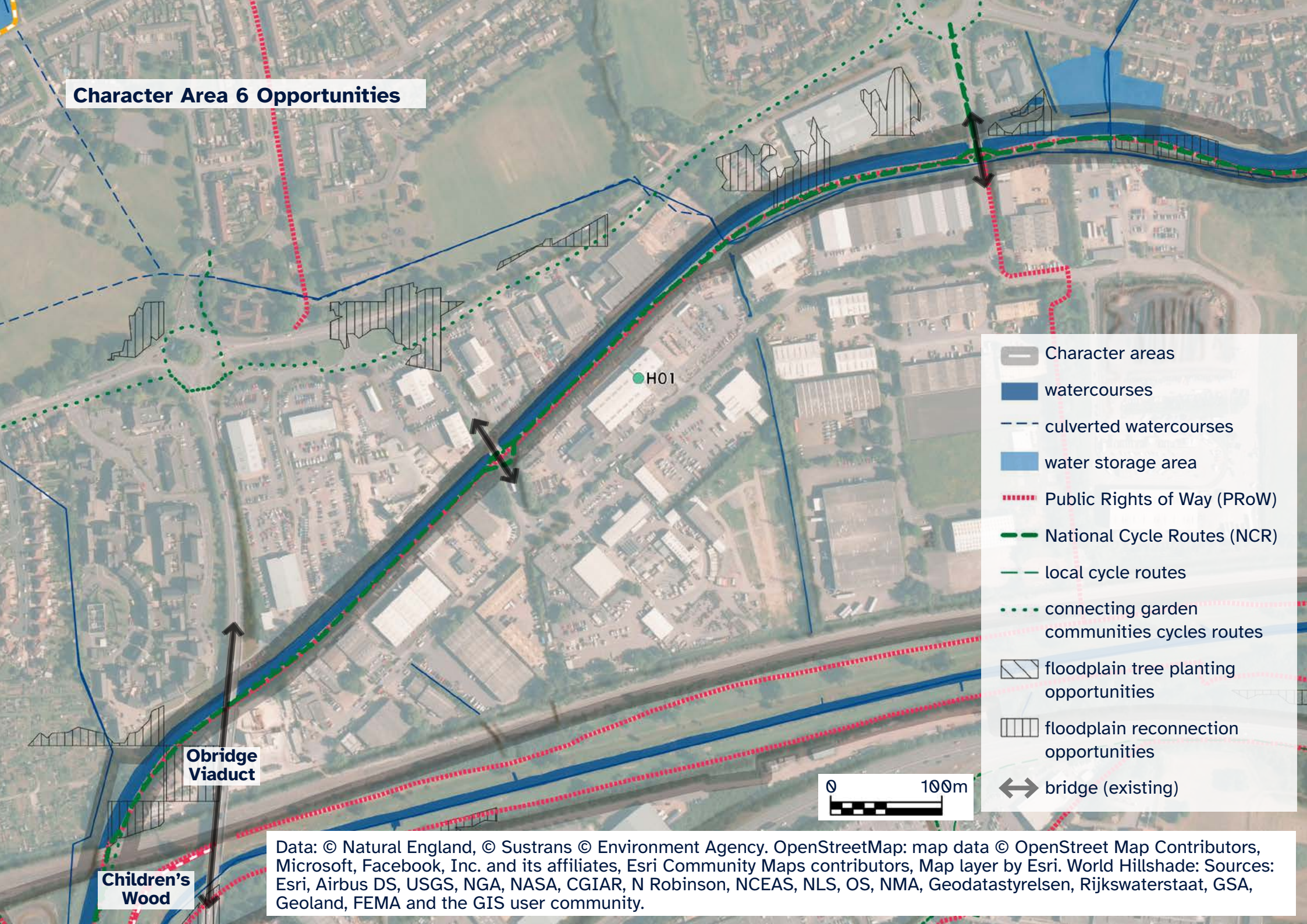
Public Access












- PA20 - Potential for access gates from Employment sites to canal, public use during lunch breaks

Habitat Creation and Wildlife

- H01 - Potential presence of invasive non-native species - constraints

Character Area 6 Opportunities

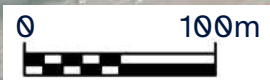


-  Character areas
-  watercourses
-  culverted watercourses
-  water storage area
-  Public Rights of Way (PRoW)
-  National Cycle Routes (NCR)
-  local cycle routes
-  connecting garden communities cycles routes
-  floodplain tree planting opportunities
-  floodplain reconnection opportunities
-  bridge (existing)

Obridge Viaduct

Children's Wood

H01



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Greening of the route



Public realm - outdoor seating



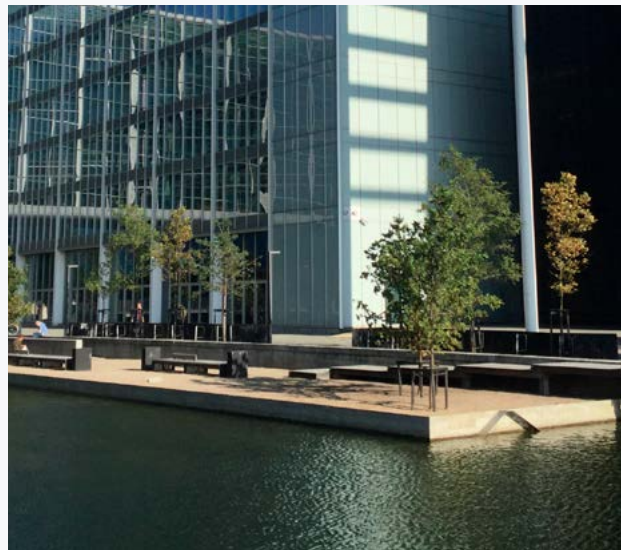
Positive relationship to water



Provision for active travel



Active frontage to water



Strong connection to water



Industrial architecture

Opportunities urban canal (precedents)

5.9 Character Area 7: Rural Canal

Key Maintenance Issues/Constraints (Present)

- Situation raises bed level and limits navigation
- Offside vegetation clearance difficult (boat only)
- Lock gates and sluices
- Boat numbers to ensure canal is viable
- Footpath access
- Availability of water for navigation in summer
- Towpath surfacing and links and signage to it. Potholes, car parking locations/ lack of access by public transport
- Agricultural runoff within the wider catchment has led to increased phosphates and nutrient input into the water, causing eutrophication and reducing water quality downstream

Key Maintenance Issues/Constraints (Next 25 Years)

- Over development
- Moorings
- Climate change - too much water for short periods and not enough water for longer periods. Over abstraction into canal - drought on tone
- Increased footfall and usage of towpath
- Lock gates at Maunsel will need replacing in 2027
- Possible leaks at Standards locks being investigated. May need funding
- Ecological constraints on proposed enhancement works include potential presence of invasive non-native species and protected species. Ecological surveys would be required prior to works commencing and protected species licences may be required

Planned Projects:

- PP01 – Land contamination on former tip - which has been capped off and is identified in policy as a community woodland opportunity
- PP15 Opportunity for access on previous racecourse land due to allocation as part of green space associated with the Monkton Heathfield site.

Character Area 7

Canal Moorings

Bathpool Swing Bridge

landfill site

Bridgwater Road

- landscape character areas
- watercourses
- culverted watercourses
- water storage area
- flood zone 3 maximum extents
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- local nature reserves
- weir
- debris screen
- outfall
- combined sewer overflow
- bridge (existing)
- bridge (proposed)



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5.9.1 Character Area 7: Opportunities

The opportunities are grouped under the categories:

- Community Engagement (CA)
- Energy and Climate (E)
- Make Space for Water/Slow the Flow (W)
- Public Access (PA)
- Habitat and Wildlife (H)
- Recreation and Culture (RC)
- Planned projects (PP)

There is an opportunity to improve connectivity between the river and canal, linking communities and connecting them to the water and to the countryside, an alignment with the Garden Town Vision. An additional bridge over the canal, in the vicinity of the moorings, would facilitate that connection but the idea is not currently supported by the Canal and River Trust

Community Engagement

- CA02 - Reinvigorate 'Routes to the River Tone Project' (HLF), 2014-2017 / plan similar project again

Public Access

- PA20 - Opportunity for access on previous racecourse land due to allocation as part of green space associated with the Monkton Heathfield site.

Habitat Creation and Wildlife

- H01 - Opportunity to improve habitats through removal of invasive non-native species.
- H06 - Opportunity to create green links as recognised in the GI strategy and the Garden Town Vision document

Character Area 7 Opportunities

Canal Moorings

Bathpool Swing Bridge

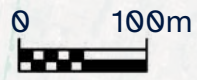
Bridgwater Road

H06

PA20

H01

- Character areas
- watercourses
- culverted watercourses
- water storage area
- Public Rights of Way (PRoW)
- National Cycle Routes (NCR)
- local cycle routes
- connecting garden communities cycles routes
- floodplain tree planting opportunities
- floodplain reconnection opportunities
- bridge (existing)
- bridge (proposed)



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6 Summary of Management and Maintenance Plan

The Management and Maintenance Plan (MMP) is provided in full detail in the Appendix B. The MMP document has been developed in consultation with the Lead Local Flood Authority (LLFA), Environment Agency and the Canal and River Trust. It provide an overarching high-level overview of the maintenance and management of the waterways through Taunton and some wider aspirations on the future maintenance and management of these systems over the next 30 years. The aim of the plan is to provide a more co-ordinated approach to enable key decisions to be made on the future development and evolution of the town without compromising on the needs of the waterways and their future maintenance and management.

The MMP five chapters:

- starting with roles and responsibilities (chapter 2)
- the Taunton Catchment Overview including the current maintenance regime and future maintenance opportunities in each Character Area (chapter 3)

- the Watercourse management approach (chapter 4)
- the Surface water management approach (chapter 5)

Policy context and other useful links for riparian owners can be found in the MMP Appendix.

As addressed in chapter 2, in Taunton, water management is divided across numerous organisations. The chapter clarifies the strategic role and powers of the Environment Agency, the LLFA and Internal Drainage Board (IDB) and other authorities and its regulatory context, as well as riparian responsibilities for maintenance of the watercourse. It highlights the need for a more integrated approach to river basin management (including surface water, subsurface water, and groundwater levels).

Chapter 3 addresses the Catchment Overview. The Taunton and Bridgewater canal is 23.33km (14.5 miles) in length, passes through the unique lowland areas of

Somerset, many parts of which have been designated as Sites of Special Scientific Interest.

Chapter 4 gives the overview of the current maintenance regime. It lists the current day to day maintenance actions required across all waterways and goes into more detail on specific recommended actions within each Character Areas for consideration, review, and future action. Maintenance opportunities are shown on basemaps per Character Area (refer to 3.4 Future Maintenance Opportunities).

The MMP emphasises that the development of Taunton must allow free, safe, and easy access to undertake maintenance for the waterways and SuDS features. It required new developments to retain an 8m buffer along the waterside. Any developments progressed in Taunton will require easements to ensure rights of access to maintain and manage the waterways.

The key maintenance and management issues that need to be addressed for future maintenance are:

1. Control the spread of Himalayan Balsam and other non-native invasive species.
2. Land use change and land management change to reduce sediment loss within Taunton and in the wider catchment.
3. Natural Flood Management Interventions to reduce trash screen blockages downstream.
4. Regular inspection and removal of blockages to outfalls and culverted watercourses.
5. Development of an integrated asset inspection and maintenance plan for Taunton utilising outputs from the Surface Water Management Plan and the Asset Database Project. Including identifying 'lost' assets, SuDS assets and assigning responsibilities for ongoing maintenance of these.
6. Education and promotion of riparian responsibilities through local community initiatives.
7. Sustainable Drainage Systems (SuDS) adoption for surety of long-term maintenance and management of new SuDS on new developments. SuDS to be inspected during construction and then maintained regularly upon completion.
8. Improved access for river maintenance/structure inspection and repair/culvert inspection and maintenance.

The section of the guidance in Chapter 4 deals with the watercourse management and is aimed at riparian owners rather than statutory organisations with flood risk management responsibilities. The section of the guide proposes to develop a programme to carry out maintenance work.

Chapter 5 summarises the surface water management approach. The guide concludes that SuDS offer an approach to drainage that mitigates the impact of new development on flood risk and builds our

resilience to flooding. The plan requires early pre-application engagement to ensure that drainage is considered properly in the design layout. This will maximise the opportunity for a more integrated multi-functional approach to SuDS.

Further SuDS guidance and background information can be found in Appendix C

7 Taunton Waterways Strategy

The early sections of this Taunton Waterways Strategy and Guidance document have established the Vision and values, or Outcomes, behind the Strategy, and have set out the key challenges, issues and opportunities influencing potential investment in the town's Waterways corridors. The Management and Maintenance Plan summary (and Appendix B) describes in some detail the operational commitments specific to maintaining the primary function of the Waterways – to manage water resources to minimise the impacts of flooding and drought – which must not be compromised.

The remaining sections of the Strategy address the potential investments that sit outside of the primary water management functions but are compatible with those functions. The remaining sections, cover Strategic Goals, targets in the form of Prioritised Investments, Design Guidance in relation to major waterside development sites and guidance on Delivery.

7.1 The need for strategic goals

The Strategic Goals for the Waterways are framed by the overarching Vision for Taunton Garden Town which is for the town to be “**...flourishing, distinctive, and healthy ... a place where the outstanding natural environment, diverse and thriving economy and inspiring cultural offer, contribute to an exceptional quality of life and well-being.**”

In that context, **the primary aim of the Taunton Waterways Strategy and Guidance is to maximise the positive placemaking, environmental and community outcomes that can be achieved from every investment made in water management and waterside development.**

The Garden Town Vision defines the future Taunton, and the Waterways Strategy and Guidance outlines one of the key means of reaching that destination. The Strategic

Goals for the Waterways define the high-level deliverables that will move the town towards reaching its Vision, establishing a clear set of outline actions and targets that will frame the Prioritised Investments. The latter will need to include more precise actions and measurable outcomes and will rely on a coordinated partnership approach to delivery. The associated funding and officer capacity are not currently available and so achievement of the Goals is dependent upon appropriate financial and human resources being made secured.

The purpose of the Goals is to be the overarching structuring elements that will guide, facilitate and enable a concerted push towards delivering the Vision. The Goals will:

- Make it easier for organisations to work together towards a common purpose defined by the Outcomes from Investment
- provide a spatial framework to guide investment to the most appropriate locations

- engage with Taunton's residents and businesses to communicate key messages and encourage their active involvement in delivering the Vision
- stimulate everyone involved in the future of the Waterways to think more creatively about the benefits that could be achieved by a clearer focus on a broad range of positive outcomes
- demonstrate to potential investors that Taunton has a collective commitment to delivering its Garden Town Vision and is taking practical steps toward it
- help to position the Waterways at the heart of the town's cultural identity and enhance the sense of place; and
- respect the primacy of effective water management and flood risk avoidance

The Goals reflect the essential ingredients of urban regeneration and growth processes where: working together across organisations; agreeing the way forward; coordinating effort and investment; communicating success; building investor confidence; and strengthening the community's capacity to play on increasing role are all core to achieving and sustaining success over the long term.



Potential for placemaking



Stakeholder site walk over

They also reflect on the point that, despite an evident willingness from across the Stakeholder Team to work together more effectively, the organising elements necessary to support a coordinated approach are not yet in place.

7.2 Taunton Waterways strategic goals

The Goals for Taunton Waterways are expressed as ‘The Eight Cs’.

- Conveyance
- Collaboration
- Coordination
- Community
- Creativity
- Confidence
- Culture
- Connectivity

They need to be progressed in parallel with one another because each supports the others. Collectively they demonstrate

commitment to a resilient, progressive and influential process of positive change aligned with the Garden Town Vision.

7.2.1 The Eight Cs of Taunton’s Waterways

Strategic Goal 1: Conveyance of water

SG1 expresses the prime goal of effective water conveyance through the town to mitigate flood risk, without which there would be no prospect of achieving the Garden Town Vision. The Taunton Waterways Strategy and Guidance recognises that primacy and incorporates the Management and Maintenance Plan accordingly.

In addition, four significant areas of investment in the water conveyance infrastructure have been identified through the Waterways Strategy; Longrun Meadow, Goodland Gardens & Mill Stream, French Weir and Firepool Weir. These could have a substantial and potentially transformative

effect on the achievement of the Garden Town Vision across the town as a whole. If planned appropriately, in accordance with the Strategy, each would make a major contribution to the achievement of the desired Outcomes from Investment. Conversely, uncoordinated and piecemeal investment could prevent those Outcomes from being achieved.

Goal to be achieved: To deliver committed and emerging projects in accordance with the Management and Maintenance Plan, and to develop an outcomes-led approach to planning the four areas of opportunity, referred to in the next section as the Combined Projects.

Responsibility: Waterways Steering Group (see SG2)

Measure of success: In addition to implementing the committed projects in the Management and Maintenance Plan, progress the conceptual thinking around the four Combined Projects.

Timescale: On-going in line with the Management and Maintenance Plan. Demonstrate progress on all four Combined Projects in line with level of priority identified. A project management resource is to be secured by Somerset Council for high and medium priority projects. Within 12 months:

- High priorities to have an agreed development concept in place
- Medium priorities to have agreement on the key components of water infrastructure required and an action plan for delivery
- Low priority to have a plan of action to agree components and develop a concept

Strategic Goal 2: Collaborative working

It was evident during the process of preparing the Taunton Waterways Strategy that each of the key organisations in the Stakeholder Team was keen to work with the others, recognising the importance of collaboration for the achievement of the best possible outcomes from each

investment, and yet the extent of actual collaborative working is currently limited.

One of the Strategic Goals is therefore to establish a more formal and organised forum for discussion, debate, consideration of emerging proposals within the Waterways and, where appropriate, provide collective endorsement for investment proposals. The forum would not have statutory powers or regulatory authority but would provide decision-makers with considered guidance and advice and would help to steer emerging proposals to achieve both their functional purposes and the wider range of positive benefits defined by the Outcomes from Investment.

Goal to be achieved: To significantly improve collaboration across relevant bodies in order to facilitate the delivery of each of the other Strategic Goals and to progress Prioritised Investments in an efficient and coordinated manner.

Responsibility: Somerset Council Garden Town Team.

Measure of success: Working with the Stakeholder Team to secure an agreed approach to governance.

Timescale: Within 6 months.

Strategic Goal 3: Coordinated delivery

The Taunton Garden Town Vision provides clarity on the direction in which the town is moving, and considerable work has been carried out to provide the design guidance necessary to reflect the Garden Town aspirations. However, Local Plan policy predates the establishment of the Garden Town and there is no clear spatial plan for the Waterways, making it challenging to achieve coordinated decision-making about potential investments.

In the absence of clarity on the spatial plan, there is a high risk of projects and initiatives being implemented in a way that, at best, fails to optimise the wider opportunity and, at worst, conflicts with other beneficial opportunities and compromises the ability to deliver better project solutions with more positive outcomes in the longer term.

Over the longer term, that uncoordinated delivery of incremental investment will erode the opportunity that a better-planned approach could offer for achieving genuine transformation for the town.

There is a need to provide a structuring plan to frame all investments over the coming years in order that the multiple elements of incremental development that gradually come forward work together, complementing one another, expressing shared design traits and gradually building the picture of a cohesive linear park running throughout the Waterways Corridor.

Goal to be achieved: This Taunton Waterways Strategy and Guidance will become a material consideration in planning decisions, which will assist a rational approach to development. Additionally, a series of themed plans is required to coordinate the various types of investment such that the whole is greater than the sum of the individual parts. The plans will provide consistency as a basis for assisting the Steering Group and Somerset Council's decision-makers.

Responsibility: Somerset Council Garden Town Team and/or Planning Team.

Measure of success: Acceptance by Somerset Council of the Taunton Waterways Strategy and Guidance as a material consideration.

Stakeholder endorsement of a 'Linear Water Park Concept Plan' for the Waterways Corridor. This will form the structuring plan upon which a series of frameworks can be developed for delivery of coordinated public realm, connectivity, biodiversity, recreation and the like, as referenced under 'Frameworks' in Section 8.

Timescale: Subject to funding, Linear Water Park Concept Plan to be complete within 12 months. Complementary Frameworks to be complete within two years.

Strategic Goal 4: Community involvement

The Taunton Waterways Strategy has been developed with the Stakeholder Team and

Consultant Team but has not yet had the benefit of wider community engagement and involvement. Public consultation will be carried out prior to adoption of the Strategy and Guidance. Post-adoption, implementation of the Strategy will require and benefit from community involvement, for example in the development of the structuring Frameworks and consulted on emerging concepts for the Combined Projects, both of which are explained in Section 8.

Community involvement in planning for the future of the Waterways is important for several reasons:

- it shares a host of new perspectives and reveals ideas that have not previously been aired
- it builds a community's understanding of the challenges that constrain investment and the development decisions, and the opportunities available
- it helps to manage expectations and understanding of the scope for realistic aspirations

- it can develop common ground and shared purpose; and
- it generates buy-in to the process and, often, support for emerging proposals

Community involvement should encompass the breadth of Taunton's communities - geographically and socio-economically. Every age group and social profile should be engaged, including residents and business communities, and visitors where appropriate.

A Garden Town Communication Strategy is due to be prepared. Consideration needs to be given to the suitability of that process and the corresponding deliverables to encompass a Waterways Community Framework, or whether an additional document is required.

Goal to be achieved: To involve the Taunton community in implementing the Strategy, introducing fresh thinking and building local knowledge, understanding and, therefore, capacity to advise on proposals that emerge long after the Consultant Team has completed its work.

Responsibility: Somerset Council Garden Town Team

Measure of success: Prepare a Community Framework (standalone or as part of the Garden Town Communication Strategy) to guide and organise a coordinated programme of community involvement. Work with the proposed Taunton Garden Town Community / Stakeholder Forum (or establish a new Taunton Waterways Community Advisory Group or Citizens Panel or similar if necessary), to provide focused community representation to work alongside the Steering Group. Increasing the level of participation in consultations, its understanding of placemaking, the extent to which the Taunton community believes it can influence outcomes and their satisfaction with the process.

Timescale: A Communication Strategy or Community Framework to be prepared and approved within 12 months. Establish Advisory Group or similar within 12 months. On-going measurement of participation

levels, with annual monitoring and reporting.

Strategic Goal 5: Creative thinking

The Waterways Strategy has adopted the outcomes-led approach to ensure that each investment made in the Waterways Corridor delivers the widest range of positive benefits. Prior to that approach, there has been a tendency for each investment to focus on narrow outcomes specific to the primary purpose of that investment, be that operational water management, footpath maintenance, nature conservation, and so on.

The great value of the process of defining the Strategy is that it has inspired the Stakeholder Team to think more creatively and laterally about what else those investments could achieve, besides the primary purpose.

Goal to be achieved: Inspire those involved in planning in the Waterway to think more positively and aspirationally about what can be achieved within the Corridors.

Realism is important, but that makes creative problem solving all the more essential.

Responsibility: Waterways Steering Group or an equivalent group with steering function yet to be agreed.

Measure of success: Achievement of multiple positive outcomes from each investment in the Waterways.

Timescale: On-going throughout implementation of the Strategy and beyond.

Strategic Goal 6: Confidence building

All investment relies on the confidence of the investor in the scheme to which they are considering committing. Urban regeneration and economic development are no different. As a general rule, investors and funding bodies tend to be more supportive if there is a clear vision, a set of goals agreed with key stakeholders and commitment to a plan of action. This provides confidence that a place has been properly planned with the right people and

that, as a consequence, there is a higher degree of certainty and a lower level of risk than for unplanned places.

Government or institutional investors tend to be interested in the degree to which their investment will result in tangible improvements over the longer term, related to particular agendas, funding criteria, positive legacies and longer term economic uplift. For example, the Government needs housing on a large scale, climate resilience, nature recovery, healthy living and well-designed places. The breadth of the Outcomes from Investment that effectively define the values behind the Waterways Strategy will help to secure investment that delivers positively against these agendas. There is more on funding criteria in Section 10.

Prospective developers or promoters of the allocated development sites within the Waterways Corridors will draw confidence from the on-going implementation of the Taunton Garden Town Vision and the emergence of a Waterways Strategy, which they would expect to enhance market

values and therefore improve commercial viability over time. A strategic approach that identifies opportunities within the Waterways Corridor with potential to support the viability of development sites, perhaps through phosphate management or provision of strategic green space and biodiversity, will help to build confidence among potential funders and investors.

Urban regeneration also relies on investment from within the Taunton community. If town centre and waterside businesses that rely on patronage gain confidence that the likely future population growth of the town will see large scale residential development on key sites within the Waterways Corridor, they are more likely to remain in the town, invest in maintaining their businesses or start new businesses in order to capitalise on that localised growth. Similarly, entrepreneurs and businesses that grow out of the Innovation Centre for example may be more likely to take space within the town centre if they anticipate it becoming more vibrant over the next decade.

That confidence comes from seeing a clear and approved Strategy.

Goal to be achieved: To build confidence among all potential investors and funders about the commitment to well-planned and viable growth in the town centre and Waterways Corridors. That will require clear communication of the vision, the role of the Waterways in achieving the Vision and stakeholder commitment to making things happen. Effective communication will benefit from storytelling around an ambitious and compelling plan in the form of the , supported by clear Goals, complementary Frameworks and the delivery of projects, including Quick Wins.

Responsibility: Somerset Council's Taunton Garden Town Team

Measure of success: Track both funding received from all sources for Waterways investment propositions, and the level of prospective developer interest in the waterside regeneration sites. Locally, work with the business community and

associated groups and take an annual (or at least biennial) poll to assess changing level of confidence in the town.

Timescale: On-going, with annual monitoring and reporting.

Strategic Goal 7: Cultural enhancement

Much of the town turns its back on the river and canal. Even in the centre of town, there are few urban spaces that engage positively with the water and treat it as a major placemaking asset. Water is not generally recognised as a being at the core of the town's identity on a day-to-day basis.

There is a substantial opportunity to change how the town thinks and feels about its natural and naturalistic assets, including the Waterways and the adjoining and surrounding countryside. The Garden Town initiative represented an enormous step in that direction, and identified the Waterways as the key to unlocking and redefining the town's relationship with the natural environment within which it sits.

This can be further achieved through a combination of water-related education, information, interpretation and events.

Goal to be achieved: For water to increasingly be seen and experienced as an important part of Taunton's cultural heritage, appeal, sense of identity and day-to-day life, including introducing more activity onto the water and or water's edge, whilst respecting ecological and operational requirements.

Responsibility: Somerset Council Taunton Garden Town Team

Measure of success: Increasing the number of residents, businesses and visitors who view the Waterways as being part of Taunton's appeal now and in the future, and who use the water in one way or another.

Timescale: On-going, with annual monitoring and reporting

Strategic Goal 8: Connectivity

Somerset Council recognises the positive links between active travel, physical and mental health, the environment, air quality and response to climate change, and the Waterways Corridor is a very substantial resource that can play a significant role in encouraging and increasing participation in active travel across the town and beyond.

The Council's Local Cycling and Walking Infrastructure Plans (LCWIP), Local Transport Plan and 'Connecting our Garden Communities' plan provide the wider context for delivering improvement in active travel and serve as material considerations in planning decision-making. The Waterways Strategy must be consistent with these, whilst providing more clarity, definition and detail aimed at increasing the level of active travel within the Waterways Corridor specifically.

The Waterways offer additional, waterborne opportunities for participation in active travel - less so for commuting but certainly for recreation, health and fitness purposes.

Goal to be achieved: To delivery an increase in active travel participation throughout the Waterways Corridor, in accordance with the Council's wider commitments, proposals and initiatives.

Responsibility: Somerset Council Active Travel

Measure of success: Produce a Connectivity Framework specifically for the Waterways Corridor, that identifies, prioritises and details the investment required to implement positive change. Monitoring with the aim of evidencing an annual increase in the number of people using the Waterways Corridor for active travel purposes, be it commuting, recreational, healthy living or environmental reasons.

Timescale: Connectivity Framework to be completed within 18 months, with ongoing monitoring.



8 Prioritised investments

This section outlines the process of identifying, evaluating and prioritising potential investments. The recommended investments are currently unfunded.

8.1 Project identification

The Taunton Waterways Strategy builds on previous work carried out by the Council including the River Tone Task and Finish Group, established to identify projects which would improve the River Tone and its surroundings, and the Taunton Town Centre Rethink Framework that raised the importance of the River Tone to Taunton and stated that it should be placed at the centre of the Council's future development plans.

The Taunton Rethink highlighted the need for more detailed understanding and planning, leading to a commission undertaken by Atkins in 2018-19 which explored the complexity of river corridor issues, recommended actions and identified a long list of potential themed improvements projects. That list has

formed the starting point for Project Identification under the Taunton Waterways Strategy, as illustrated below.

The Atkins work identified 143 potential projects, which they reduced to 65 owing to duplication or lack of clear project definition. They were categorised under six themes (Biodiversity, Development and Regeneration, Landscape Enhancement, Leisure, Movement and Water Management) and relationships across themes were recorded.

The formation of the Taunton Waterways Strategy Stakeholder Team has enabled the list to be updated, evaluated and expanded, taking account of more recent policy and guidance, and an understanding of emerging and planned projects.

Following initial discussions with Somerset Council and the Stakeholder Team, the Consultant Team recorded over 300 potential projects and investments, reduced to 134 following removal of duplicated and inadequately defined projects, and projects that are planned by the various

programmes of the water management organisations. The latter were removed because they are already in process and are captured by the Management and Maintenance Plan summarised in the previous section.

Other potential projects associated with allocated redevelopment sites were excluded from the shortlist because they will be planned, assessed and delivered through the normal planning process for those sites. Site-specific Design Guidance for those sites, referencing potential projects where appropriate, is provided in Section 9.

8.2 Project evaluation and shortlisting

Somerset Council and the Consultant Team carried out a shortlisting exercise that considered potential project deliverability.

It included project ownership, responsibility and fundability, and considered the likelihood of potential projects delivering improvements to the town in a way that would achieve multiple positive outcomes. In response to both considerations, it became clear through the shortlisting process that:

The coordinated strategic planning and delivery of inter-related projects working together is more likely to achieve the range of desired Outcomes from Investment than the ad hoc implementation of multiple individual projects

That coordinated delivery relies on the development of both strategic proposals for key sites, and a series of themed frameworks to align investment projects such that they collectively strive to achieve common outcomes

Individual projects that are aligned with an agreed framework are generally more likely to secure political support and funding than ad hoc projects. This is of particular significance as the majority of the projects

are currently unfunded, relying on securing funding from non Council sources to secure their delivery

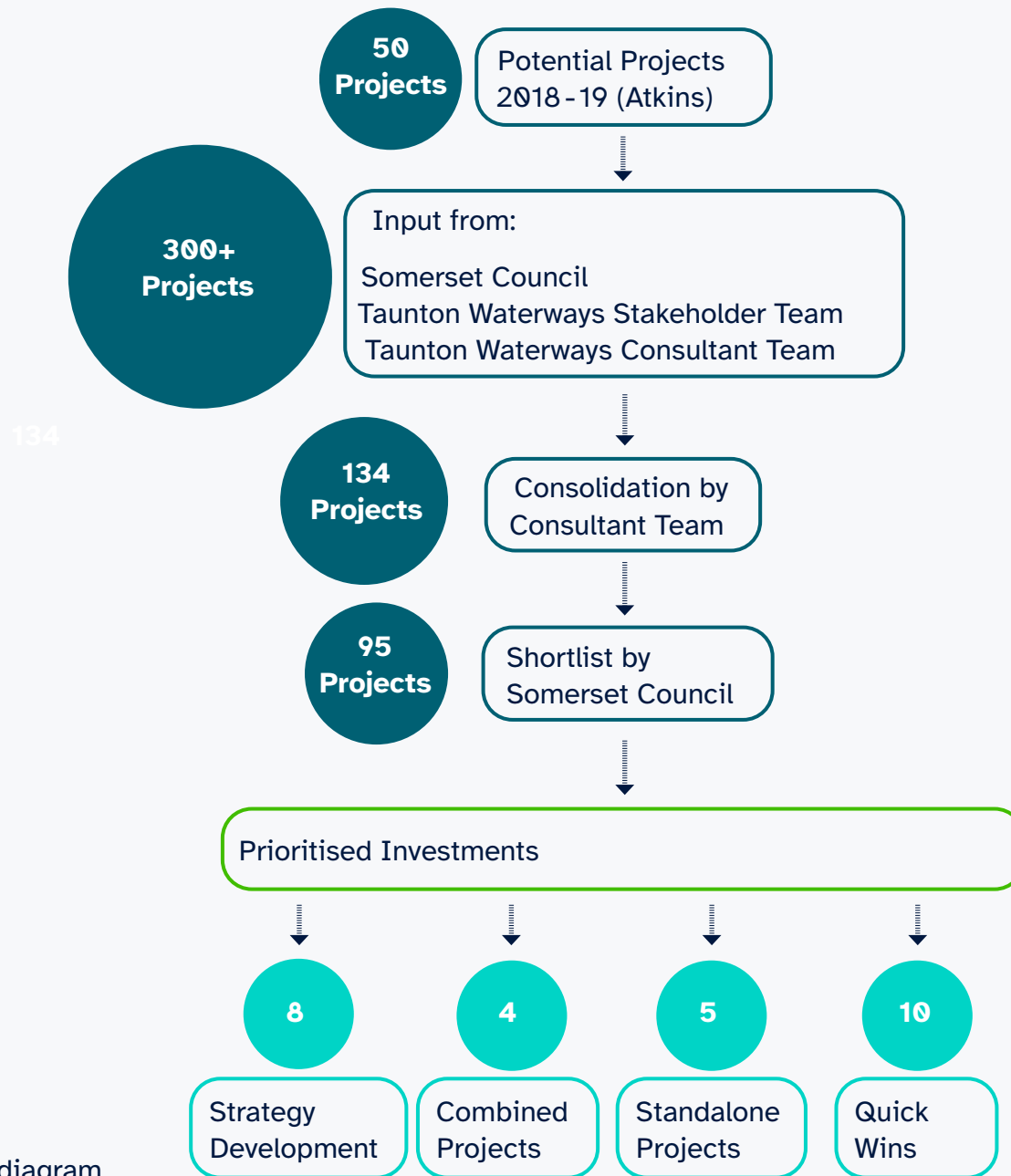
Accordingly, through shortlisting, the majority of individual projects were clustered into one of three categories:

- a. Strategic Frameworks: Frameworks will organise, rationalise and help to justify investment in a host of individual projects, enabling the collective benefits to be maximised. Individual projects (for example biodiversity enhancements) will need to demonstrate alignment with an overall diversity Framework for the Taunton Waterways;
- b. Combined Projects: In key areas of opportunity (for example Firepool Weir/ Lock), there are multiple potential individual projects. If not properly planned, one uncoordinated ad hoc project intervention could undermine the effectiveness of other projects or could compromise the opportunity to deliver a more comprehensive

solution with a wide range of possible benefits. These key areas should therefore be discussed, debated and planned collectively as part of a Combined Project to achieve a wider range of long-lasting outcomes.



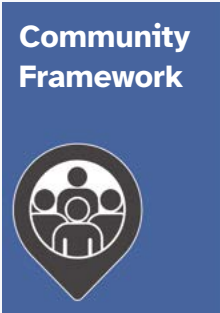

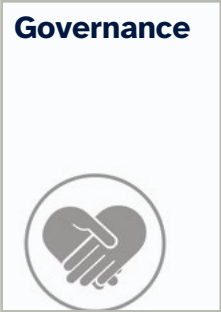



- c. Standalone projects that could achieve positive outcomes and be delivered in isolation without compromising other investments. This includes a number of Quick Win projects.

To optimise the opportunities for Taunton through this coordinated approach requires emphasis on a strategic approach to investment that establishes a series of compatible Frameworks for the Waterways within which projects can come forward and work in combination with one another to deliver and sustain improvement. The approach also emphasises the need for strong central governance to oversee the more strategic process.








Prioritised investments flow diagram

a) Strategic frameworks

Top Priority		Medium Priority		
				
Linear Water Park Concept		Waterways Biodiversity Framework		
				
Tributaries Framework	Governance	Waterways Connectivity Framework	Waterways Public Realm Audit	Waterways Lighting Framework

b) Combined projects

				
	Longrun Meadow Storage	Goodland Gardens & Mill Stream	French Weir	Firepool Weir
	Top Priority	Medium Priority		Low Priority

c) Standalone projects

	
	Standalone Projects

That emphasis on the strategic approach is evident on the shortlist (Table 10.2 Taunton Waterways Matrix) that was carried through to the prioritisation process outlined below.

Together Somerset Council and the Consultant Team reduced the total number of potential projects to 95, indicating the category into which each fitted, ready for evaluation and prioritisation by the Stakeholder Team.

Given the shift in emphasis, it also became clear that ‘Prioritised Investments’ was a more accurate term to use going forward than ‘Prioritised Projects’.

8.3 Prioritised investments

The Stakeholder Team met with Somerset Council and the Consultant Team in a workshop to determine the prioritisation of potential investments in the Taunton Waterways.

The Team accepted the proposal to categorise potential projects as outlined in 8.2 above. The Frameworks were evaluated first, followed by the Combined Projects. Standalone Projects were subsequently evaluated and prioritised by the Consultant Team after the workshop, and were presented first to Somerset Council for review and then to the Stakeholder Team for approval.

Each Framework, Combined Project and Standalone Project was discussed, considered and prioritised according to:

- a. Likely timescale for delivery over the short, medium or longer term, taking account of potential for funding, project ownership and momentum; and
- b. The anticipated breadth of positive outcomes that could be achieved from investment.

The investments likely to be delivered in the short to medium term, and with a wider range of positive outcomes were prioritised. Results are shown in List 10.3 (Taunton Waterways Prioritised Investments) and are outlined below, noting that all are currently unfunded.

8.3.1 Strategic Frameworks

Given the resource and funding required to deliver the full suite of Strategic Frameworks identified, prioritisation has been particularly important.

Governance



Top priority

Governance:

The Taunton Waterways Strategy has been formed through a collaborative process with the Stakeholder Team and it has been clear throughout that, in order to achieve the wide-ranging positive outcomes endorsed by the Team, it will be necessary to maintain that constructive, collective approach.

A Top Priority is therefore to establish robust governance to oversee implementation of the Taunton Waterways Strategy. Guidance on how the governance can be provided is set out in Section 10 and will need to be explored with and endorsed by stakeholders.

Potential funding sources for establishing governance may include Ofwat Innovation Fund and UK Shared Prosperity Fund (UKSPF).

Linear Water Park Concept:

The Taunton Garden Town Vision establishes the importance of the green and blue infrastructure to the town's future prosperity, and the Green Infrastructure Plan provides a framework for the town as a whole. Whilst this Taunton Waterways Strategy provides direction and guidance, and identifies priority

investments, there is a need for a simple but compelling illustration of the Linear Water Park Concept to galvanise action, inspire interest, stimulate involvement and support the case for investment. The Concept Plan would encapsulate and communicate the essence of the aspirational Linear Water Park, and would illustrate the Park in, say, 20 years time, following incremental delivery.



Linear Water Park Concept

It would define the Park as a major asset to the Garden Town, encompassing the sequence of green spaces and green/blue interconnections. It would represent the ambition and target for implementation of the numerous Frameworks, Combined Projects and Standalone Projects over the coming years.

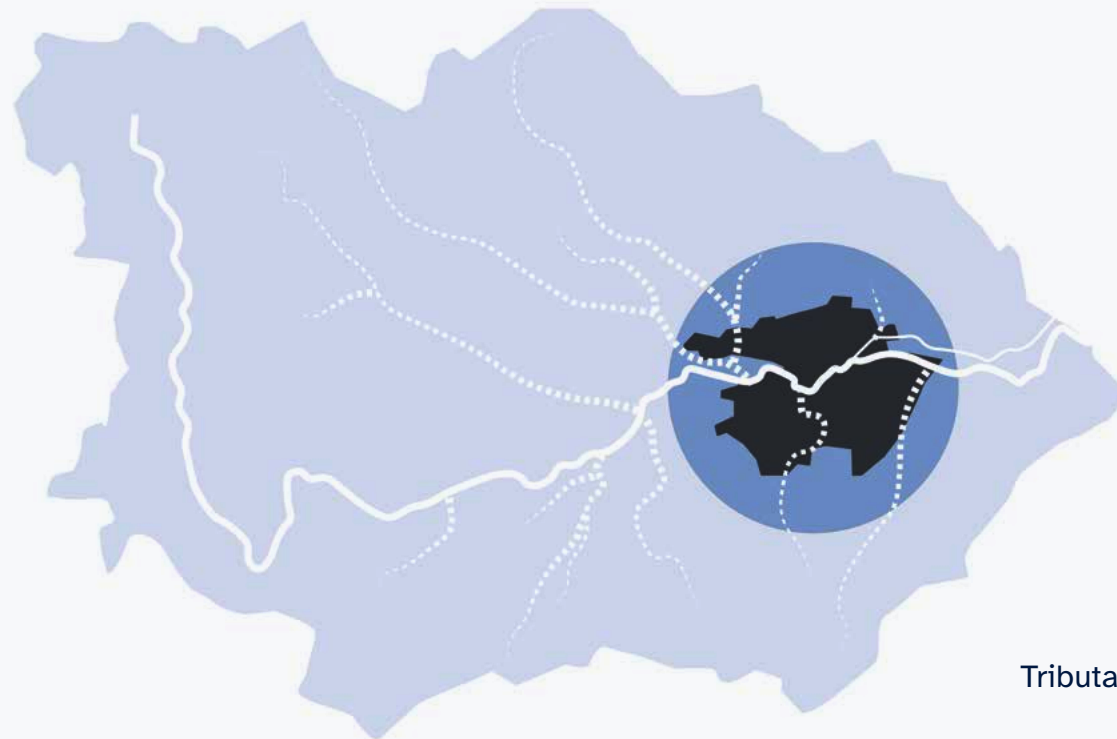
The format of the Concept Plan would need to be determined but it should be concise (c 10 sides), well illustrated and simple to understand by all, ideally including sketches and diagrams rather than CGI, and aerial and human scale perspectives rather than plans. It could be web-based, with an interactive 'story map' which changes as the reader scrolls through the narrative, and that is kept up to date as the asset is gradually implemented in full.

An indicative cost for preparing the Concept is £20,000 to £30,000, subject to scope. Potential funding sources include Somerset Rivers Authority, Wessex Regional Flood and Coastal Committee (RFCC) Local Levy, Homes England, UKSPF and Nature Recovery Network (Landscape Recovery).

Town Tributaries Framework:

In the context of the Garden Town, the stretches of river tributaries that are within the town and flow through its neighbourhoods physically connect those areas of town to the Waterways Corridor and therefore offer opportunities for

enhancing the community's relationship with water. It will be beneficial if residents can better understand how the water in the ditch at the bottom of their garden, or the Sherford Stream running through Vivary Park for example, are connected to the flow and quality of water in the River.



Tributaries Framework

Projects already identified under the Taunton Strategic Flood Alleviation Improvements Project (TSFAIP) are intended to address flood management specifically, including works to Vivary Park and golf course, but the Town Tributaries Framework would help to organise a coordinated and consistent approach that draws in ecological enhancement, public access, wayfinding and landscape enhancement opportunities within the town's green wedges and neighbourhoods. It would identify opportunities for: de-culverting and revealing the water; creating wetland habitats and other natural solutions for both biodiversity enhancement and water management; public realm improvements focused on water; and improved wayfinding that makes it easier and more appealing to track the tributaries, including incorporation into walking loops.

The Framework would inform where these investments could be made, describing how they would benefit the communities, meet local aspirations and respond to the climate and ecological emergencies. It would also provide a rationale and

justification for watercourse investment in connection with potential housing infill or redevelopment opportunities that arise in proximity to the tributaries that are within the town.

The Town Tributaries Framework would also help to stimulate community involvement and could be the basis for Citizen Science and education programmes as well as localised water-related community events as part of a potential town-wide Water Festival.

An indicative cost for preparing the Framework is £7,500 to £10,000, subject to scope. Potential funding sources include FCERM Grant-in-Aid Funding, Somerset Rivers Authority, Wessex RFCC Local Levy and the National Lottery Community Fund.

Medium priority

Following development of the Linear Water Park Concept Plan and establishment

of the Steering Group, five additional Frameworks should be prepared, each providing more detailed spatial guidance, actions and targets related to specific themes.

Community Framework:

Community Involvement in the Taunton Waterways is one of the eight Strategic Goals. It will be beneficial to prepare a Community Framework that sets out an overarching approach to the involvement of local people, encompassing:

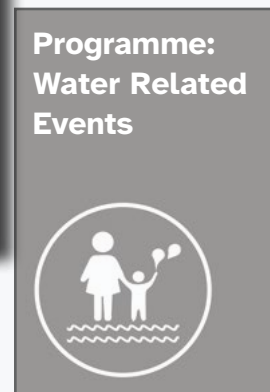
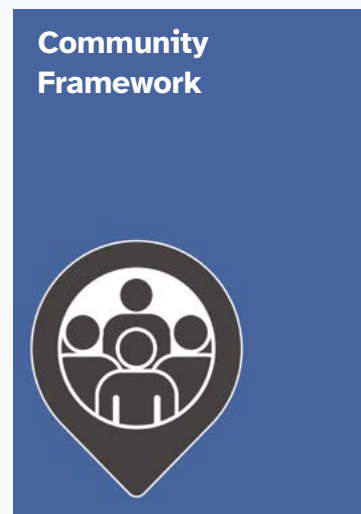
- Recommendations for working with the proposed Taunton Garden Town Community Forum, or establishing a Taunton Waterways Community Advisory Group or Citizens Panel, that would represent community interests and form a single body for efficient and transparent liaison
- A programme of consultation on the other emerging Waterways Frameworks and investments

- A programme of educational engagement that considers how to bring the local Waterways into the curriculum, and identifies opportunities for waterside learning
- An events programme themed around the Waterways, possibly expanding on Taunton River Watershed Alliance's annual River Festival but with events throughout the year, focusing on the Waterways Corridor as a whole, including the canal and the tributaries that run through some neighbourhoods
- A Citizens Science programme or monitoring and reporting, perhaps prepared with West Country Rivers Trust
- Recommendations for community leadership of 'task and finish' groups to address specific issues such as a recreation strategy or scope for interactive mapping of local walking and cycling loops

The intention is not to reinvent the wheel or duplicate other initiatives. It may be that the most effective way of preparing a form

of Community Framework would be to build on the Somerset Prepared Partnership engagement, and the Taunton Waterways Community Advisory Group would include representatives from established groups.

The indicative cost for preparing the Community Framework is £40,000



to £50,000, subject to scope and the extent and level of engagement required. Potential funding sources include Wessex Water Environment Fund, Wessex Water Community Fund, UKSPF, National Lottery Community Fund. Additional investment can be made through Social Value commitments by the professional teams that are appointed to prepare Frameworks.

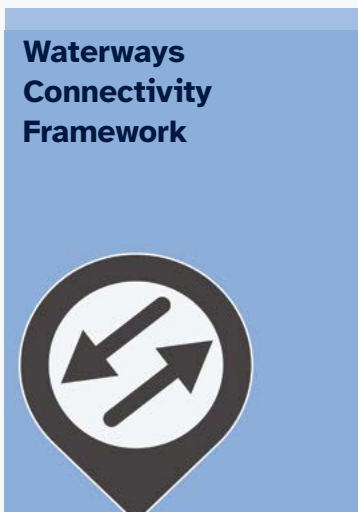
Waterways Connectivity Framework:

The Waterways Corridor offers considerable scope as an active travel resource, not just for recreational purposes but for accessing daily needs without use of the private car. In the context of the desired Outcomes from Investment in Taunton's Waterways, investment in active travel will deliver multiple benefits in terms of healthy living, physical and mental wellbeing, connection with place, awareness of nature, air quality and decarbonisation.

The Waterways Connectivity Framework will provide a focus for connectivity specifically within the Linear Water Park Concept.

It will supplement the wider work of the LCWIP and deliver on its aim of “providing green, active and sustainable travel opportunities”. The Waterways Connectivity Framework will also be compatible with the Council’s ‘Connecting Our Garden Communities’ work which references the Town Centre Design Code SPD and the importance of routes out of the town centre into the wider countryside and the need for a comprehensive approach.

The intention is not to duplicate those other documents, but to draw out



the proposals that are specific to the Waterways in response to the Linear Water Park Concept. To minimise the risk of confusion, the Waterways Connectivity Framework could form an appendix or standalone supplement to one of those documents.

WSP are currently preparing a report for Somerset Council on mobility hubs and connectivity, with a primary focus on bus service provision and accessibility. It provides important guidance on the provision of a Mobility Hub Network for park and ride facilities in particular and will establish an important high level strategy for the town.

Taunton lends itself to a ‘Hub and Spoke’ mobility approach which provides mobility offerings at different tiers to cater for varying catchments and demand. By strategically designing and locating Central, Secondary and Neighbourhood tier hubs, the town can create a comprehensive and standardised network that serves its local communities and land uses whilst

encouraging a positive mode shift onto sustainable modes.

Implementation of a ‘Hub and Spoke’ approach to Mobility Hubs in Taunton offers a scalable and adaptable solution to significantly enhance connectivity and promote the uptake of sustainable transport. Additionally, there is a benefit in a wholly compatible but Waterways-specific Connectivity Framework, or Active Travel Framework.

The point about scalability is important. A ‘mobility hub’ can range from a virtual bus stop or cycle rack up to a multimodal transport interchange. There is an opportunity for a Waterways Connectivity Framework to structure the delivery of a network of more, smaller-scale facilities, throughout the Linear Water Park, all connected back to the town centre, neighbourhoods and larger mobility hubs, to encourage the uptake of active travel modes.

There is potential integration of small-scale mobility elements alongside existing community facilities (for example at French Weir or Coal Orchard), and to introduce new elements where no facilities currently exist (eg Firepool Weir and the Pumphouse). These may consist of micro-mobility elements such as cycle/scooter hire, cycle storage with lockers, e-scooter docking bays bus interchanges and seating. There is scope to combine with café culture, cycle repair, walking loops and, potentially, with recreational use of the water, for example paddle board, canoe and pedalo hire at Coal Orchard and the two weirs.

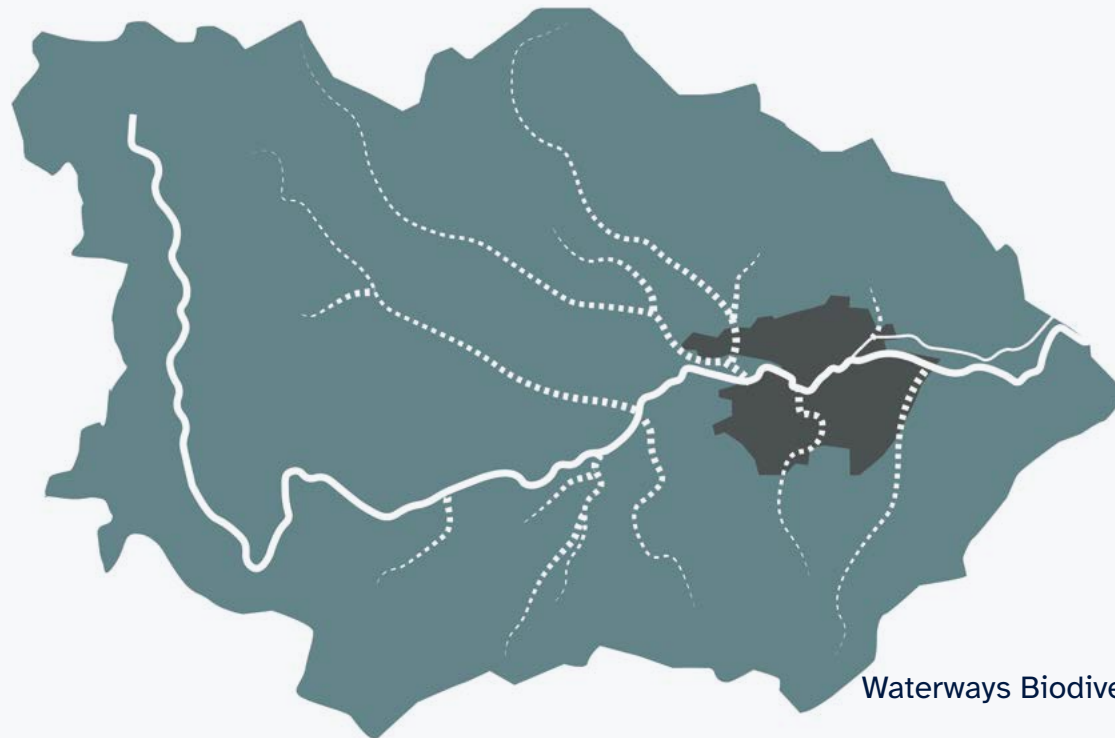
The indicative cost for preparing the Connectivity Framework is influenced by the extent to which the WSP provides a suitable base. If that work can be reviewed and expanded in the light of the Linear Water Park Concept, the cost may in the region of £10,000 to £20,000. Potential funding sources may include future rounds of Active Travel Funding.

Waterways Biodiversity Framework (Only recommended if not addressed by the emerging Local Recovery Strategy):

The Waterways Corridor is a crucial biodiversity resource for the town. It is an enormous continuous linear ecological asset that offers strategic opportunities

to deliver substantial positive biodiversity benefits for the town.

Responsibility for developing a **Local Nature Recovery Strategy** lies with the Somerset Local Nature Partnership. Still at an early stage, the Local Nature Recovery Strategy will establish the basis within which Council decisions on planning and investment will be made.



Waterways Biodiversity Framework

Given the importance of Taunton's waterways, including the catchments and tributaries, it would be beneficial to incorporate a specific Waterways section into the Local Nature Recovery Strategy. If that is not appropriate, a separate but entirely compatible Waterways Biodiversity Framework should be prepared.

It would provide a detailed action plan and targets for coordinated biodiversity enhancement within and throughout the Linear Water Park, reflecting the varying roles and priorities associated with each green space and the interventions necessary to connect them to one another. The Biodiversity Framework would establish a strong and justified rationale for enhancements in relation to potential waterside development sites, therefore assisting in the determination of planning applications.

If not addressed by the emerging Local Nature Recovery Strategy, the Waterways Biodiversity Framework would identify areas for the potential creation

of strategic waterside biodiversity off-setting, particularly along the watercourse and riparian corridor; with the aim of supporting the feasibility, viability and delivery of the waterside redevelopment sites. The off-set areas would enable the mandatory requirements for Biodiversity Net Gain for numerous redevelopments to be delivered in a coordinated manner, consolidating investment in a way that would achieve more positive outcomes for nature than could be delivered on multiple individual sites. In that way, a Biodiversity Framework that is compatible with the Local Nature Recovery Plan and that would be key to implementing Taunton's Linear Water Park would be major contributor to unlocking investment in the growth of the town.

An indicative cost for preparing the Biodiversity Framework is £15,000 to £30,000 depending on scope. A specific BNG strategy, focused on unlocking potential development sites, could be prepared for between £5,000 and £20,000. Potential funding sources include Somerset Rivers Authority, Wessex RFCC

Local Levy, the Natural England Species Recovery Programme, Nature Recovery Network (Local Nature Recovery and/or Landscape Recovery and Homes England in the context of unlocking strategic growth.

Waterways Public Realm Audit:

The Linear Water Park Concept Plan will define the role of different stretches of water corridor and will provide the foundation for the coordinated delivery of improvements over time. The most influential design tool for raising the quality of experience of the Waterways and for making the Corridor feel like one huge asset for the town is public realm design. Materials and Components should be selected as set out in the Standard within the Public Realm design guide for Taunton garden Town SPD December 2021.

Consistent use of materials, street furniture designs that are compatible with one another and continuous high quality connections alongside the water are fundamental to creating a cohesive asset that can be understood, appreciated and promoted as an attractive entity. In that way, the Waterways will become more easily understood as an important attractor and value generator.

An important part of planning for the future is to understand the present. A

Waterways Public Realm Audit



public realm audit of wayfinding, street furniture, plants and trees, materials, surfacing, public art and so on, including bespoke features such as the Space Walk. It would inform understanding of condition, quality, legibility, levels of clutter and general provision which, in turn, inform understanding of shortfalls, and the level and location of investment required to create the cohesive whole. That would also be informed by the Biodiversity Framework.

As funding, investment and development opportunities arise, identified gaps can then be plugged and standards raised in a coordinated manner that brings the unified Linear Water Park into being.

Depending on the scope and level of detail required in respect of condition survey, the indicative cost for preparing the Public Realm Audit would be in the region of £50,000, but considerably more if a condition survey is required. Funding may be available from UKSPF.

Waterways Lighting Framework:

A review of existing lighting forms part of the public realm audit but a Lighting Framework is about more than just the design of lighting columns. Lighting on the water's edge is a sensitive subject because there can be diametrically opposed views on the most appropriate provision. Continuous public access alongside the river and canal is highly desirable and demands an appropriate level of lighting for safety and security.

Waterways Lighting Framework



Conversely, the waterways are also a continuous linear biodiversity asset which generally demands a low level of lighting or, preferably, no lighting.

Development of a Lighting Framework that encompasses all Character Areas will improve consistency for protecting species and habitats whilst delivering safe and secure connections and high quality and coherent public realm. The process of formulating the Framework will stimulate discussion and demand resolution of potential conflicting opinions. Endorsement of the Lighting Framework by Somerset Council will assist with the determination of planning applications for waterside proposals.

A Lighting Strategy is expected to cost in the region of £50,000. Funding sources include Somerset Council and Taunton Town Council.

Additional Recommendation

Catchment Framework:

Stakeholder engagement has made it clear that significant investment decisions about water management in the wider catchment

could influence the Waterways through the town, so planning for the wider catchment cannot be ignored. That lies beyond the geographical remit and commission scope of the Taunton Waterways Strategy and, accordingly, it is not for the Strategy to prioritise, but it is recommended that a more coordinated approach to planning the catchment be implemented.



Catchment Framework

Multiple projects have been identified upstream and downstream of the town. Some are potentially very substantial in scale and some ideas are more developed than others, but there is, as yet, no overarching catchment framework to ensure a coordinated, efficient approach to that wider investment.

A Catchment Framework could consider not only water attenuation projects for the purposes of flood risk management, but potential changes to agricultural management and natural solutions for the positive management of phosphates, nature recovery and carbon sequestration, some of which may help to unlock development prospects in the town. It may also be possible to introduce recreational, active travel and healthy living opportunities into potential investments through creative planning and design, helping to achieve the widest range of positive outcomes, and ensuring compatibility and coordination of proposals.

Potential funding sources include Flood and Coastal Erosion Risk Management (FCERM) Grant-in-Aid Funding from the Environment Agency, Natural England's Nutrient Mitigation Scheme, Somerset Rivers Authority, FWAG South West's Somerset Catchment Partnership and Wessex RFCC Local Levy. Depending on scope, there may be potential for funding through Ofwat's Innovation Fund and the Nature Recovery Network. There are several potential funding sources for tree planting, ecological enhancement and land management, as referenced in Section 10.

8.3.2 Combined Projects



Longrun Meadow Storage



Top Priority

Longrun Meadow Storage:

This is a high priority because the TSFAIP has already set out a proposal to optimise water storage at Longrun Meadow. This would be achieved by construction of raised embankments between the River Tone and the Meadow so that the storage capacity is only used when the downstream capacity is about to be exceeded. The amenity area in Longrun Meadow would be flooded less frequently as a result and, by holding water back, the level of the Tone downstream of French Weir would be reduced, enabling tributaries to discharge freely.

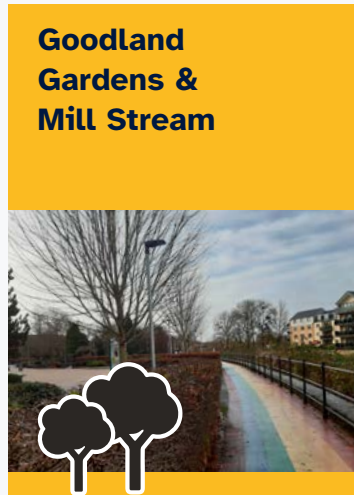
TSFAIP Factsheet LRM identifies environmental issues and constraints, including the need to maintain adequate flow in the Meadow to support wetland and ditch habitats, and the need to minimise tree loss when constructing the bunds. Although not stated on the factsheet, the LLFA is willing to work with stakeholder partners to consider how a wider range of

positive outcomes can be achieved through appropriate design and implementation of the optimised storage solution.

The concept is at an early enough stage to consider a range of perspectives with a view to accommodating new ideas that are compatible with the primary water management purpose. Potential opportunities will need to be explored for wet and dry recreational use of the area, active travel along the proposed bund and through the Meadow and landscaped placemaking that makes the revised Meadow a more appealing destination for residents and visitors to the town.

Noting that implementation of the storage solution will itself have environmental impact and that a solution will need to incorporate biodiversity net gain, there may be an additional opportunity for a level of gain that exceeds the mandated requirement. If that is the case, it may be possible for the additional biodiversity capacity to be used to offset the BNG requirements of one or more of the waterside development sites.

Medium priority



Goodland Gardens and Millstream:

Millstream is the old leat from French Weir, powering the former Town Mill in the eastern corner of what is now Goodland Gardens, to the rear of the former Debenhams store. The Taunton Waterways Strategy, aligned with the Garden Town Vision, aims to raise local awareness of the significance of water to the town's historical success and ambitious

future. Millstream and Goodland Gardens are at the core of Taunton's historic centre and are an ideal real-world example of how the town developed with the water at its heart.

Projects MS1 and MS2 in the TSFAIP are purposefully focused on water conveyance and are intended to, respectively, reduce the constriction of water flow on the Millstream (by raising the Castle Street highway bridge and footbridge that connects the Gardens to the bus station) and divert flows from the Sherford and Galmington streams to the River Tone at French Weir. Additionally, it is very desirable to introduce active frontage overlooking the footpath alongside Millstream, to improve natural surveillance and make it a more attractive route.

Goodland Gardens themselves are an important historical and placemaking asset, in very close proximity to heart of the town centre, Museum of Somerset and Castle Green and strongly connected to the River, Town Bridge and, by extension to French Weir. Yet the interface with the water is not as positive as it could be, particularly as the

current pedestrian bridge over the river is in need of replacement.

The relationships between the Gardens, Millstream, the town centre and the numerous potential redevelopment sites to the west (including Tangier, the two small sites either side of the Tangier Way and the car parks) is not clear. As a consequence, there is a risk that any proposals that come forward for works to the Gardens, the stream, bridges or development sites could compromise the opportunity to realise the full potential value of this area. It therefore requires a more collaborative approach to comprehensive planning, prepared in the light of the Linear Water Park and the other emerging Frameworks mentioned above.

French Weir:

Through the Stakeholder Team workshops and engagement it is apparent that there are a number of possible interventions at French Weir but none is urgent and none are related to essential water management because the weir does not perform a primary flood management purpose. Instead, possibilities exist for non-essential projects such as hydropower generation, improvements for navigation, improving fish passage and provision of a viewing platform.

French Weir



However, collaborative discussion about the future of the weir is important in connection with other potential investments, including the water storage on Longrun Meadow, the possibility of diverting flow from Sherford and Galmington streams and the aspirations for improved and continuous public access to the water's edge including Marshalsea Walk and in connection with redevelopment of the Tangier site. Additionally, the Waterways Connectivity Strategy is likely to identify French Weir Park as a small but important hub, and the Weir and Park both become increasingly important destinations as the town focuses increasingly on its water and the Linear Water Park asset, both of which may demand improved pedestrian and cycle access over the weir which is currently narrow.

It is recommended that discussion about an ideal package of works for French Weir that achieves positive outcomes should commence while there is no urgency to act. That would then form the basis of planning and investment decisions and funding requests.

Lower Priority

Firepool Weir:

Similar to French Weir, there are a number of potential investments in Firepool Weir, the adjacent Firepool Lock and their environs but with no requirement to carry out urgent works. Opportunities include a canoe pass, fish pass, renewable energy generation and, importantly, the reinstatement of pedestrian access across the weir which would form a looping walk through Children's Wood in conjunction with Obridge footbridge.

Firepool Weir



There is also scope to remove or reprofile the water's edge which has become unmanaged and overgrown, in a way that delivers enhanced biodiversity value.

All of this should be considered in the light of the potential importance of Firepool Weir, Lock and Pumphouse as a destination for walkers, wheelers and waterborne recreationists as part of a waterside loop connected to the town centre and French Weir. Investment in facilities and placemaking at the two weirs, and in the quality of the public realm that connects them, is an important ingredient in making the Linear Water Park into a recognised asset for the town.

There is an important opportunity to collectively discuss the ideal plan for investment in Firepool Weir so that a coordinated approach can be pursued that would deliver the maximum range of positive outcomes alongside operational requirements.



Standalone Projects



8.3.3 Standalone Projects

Most of the potential standalone projects identified through the Waterways Strategy have become absorbed into the Strategic Frameworks or Combined Projects. Of those that remain, most are Top Priority / Quick Win projects, as outlined below.

Quick Wins / Top Priority

Taunton Garden Town / Waterways drop-in exhibition:

Open an unmanned exhibition in a vacant unit in a convenient town centre location ideally adjacent to the River. The exhibition would include the information about the Garden Town and Waterways Strategy initiatives, and progress on both. The aim would be to raise awareness and inspire involvement in the process of growing the town in a sustainable way. Having it unmanned makes it more affordable and therefore deliverable, but it would be preferable if it could be manned by volunteers.

Floating business units:

In advance of studying the economics of introducing permanent floating business units on the water, establish a temporary floating pop-up unit at a convenient town centre location as a demonstration of intent and a physical intervention that puts activity onto the water. The unit would be experimental and may be a loss-leader, but income could be generated if it were a café for example, either just a kiosk counter or potentially with a small deck for seating.

Pumphouse conversion:

Explore the viability of introducing café space and other active frontage into the ground floor of the Pumphouse, or between the Pumphouse and Firepool Lock, as part of a comprehensive conversion of the landmark building. The aim is to take the opportunity of conversion to create an eastern 'bookend' to the town centre, along with French Weir to the west.

Emphasise the importance of water to the past, present and future of Taunton:

Prepare an update to the Somerset Cultural Strategy, or create a Taunton Waterways-specific information pack, to reflect the importance of water to Taunton through the ages, and to project the role of water in delivering the Taunton Garden Town Vision. If that is not appropriate, use the opportunity of developing the Community Framework to determine the best means of conveying the cultural importance of water in the town and making part of the town's DNA.

Data counts:

As an evidence base for future funding requests, investment decisions and on-going monitoring and recording to demonstrate the success of the Garden Town and Waterways Strategy initiatives, carry out pedestrian and cycle counts on the canal towpath and at key points along the river.

GIS mapping:

Share GIS mapping from the Waterways Strategy with the Stakeholder Team to

supplement information banks and provide consistency of baseline data.

Strategic advice in relation to potential new town centre bridges:

It is important that potential new bridge crossings would not compromise the ability to deliver other initiatives, such as introducing more activity onto the water in the vicinity of the town centre. Decisions about a potential cycle bridge should therefore be informed by the Linear Water Park Concept, Connectivity Framework and the feasibility of introducing floating business units.

Priory Bridge Road cycle path:

Investigate with Somerset Highways the potential cost-benefit of providing a cycle path across the road bridge to link the north and south sides of the river, between Youngman Place and the path on the south side of Morrisons supermarket.

Plan for Firepool Boulevard:

In the event that the Firepool Boulevard is constructed in advance of built development on either side, consider scope for public art and/or pop-up units.

Utilities pipe art project:

Work with Bridgwater & Taunton College and the Environment Agency to investigate interest in, and the feasibility of, implementing a temporary art project that utilises the service pipe that crosses the river between the Tangier site and the south east corner of French Weir Park.

Medium priority**Floating business units:**

Somerset Council Economic Development Team to investigate the feasibility of introducing permanent floating business units, drawing on operational advice from the Taunton Waterways Steering Group. The units would serve to draw people directly to the water's edge and may encompass

the likes of refreshments, micro-brewery, watersports hire, cycle hire or water-related maker space for example.

Renewable energy and heat:

In the event that comprehensive refurbishment is planned for the Musgrove Park Hospital, investigate the scope for water source heating and hydropower generation.

Cricket Ground interface with the river:

Continue dialogue with Somerset County Cricket Club about the Waterways Strategy ambition for the town to engage directly with the river, and to explore the scope for stronger positive interface between the cricket ground and the Linear Park asset.

Taunton and Bridgwater Canal Recreation Strategy:

The Canal and River Trust has not considered the preparation of a recreation strategy for the canal in Taunton as a priority, focusing instead on facilities in Bridgwater. Whilst this is understandable,

the development of the Taunton Waterways Strategy places new emphasis on the role and use of both the canal and river, which has increased the importance of understanding the potential for recreational use of the canal.

Lower Priority**Improvements to pedestrian and cycle routes in the vicinity of Marshalsea Walk, French Weir and Millstream:**

The quality of the routes in this area to the north of Tesco supermarket is substandard and opportunities should be sought for improvement. This should be considered in the context of one or all of the following:

- the potential redevelopment of the Tangier site
- the design of the Longrun Meadow water storage project and/or
- longer term proposals for French Weir

8.4 Indicative costings for public realm

Indicative Budget Costs for material types as specified for the Public Realm Standards. (Note: Costs assume no abnormal costs associated with the carrying out of works and assume a base specification of sub base build up, i.e. no regulating layers, no concrete slabs, etc.):

Core Standard

Pavings Slabs Smooth; fine to medium grained sandstone; Forest of Dean Pennant/Scoutmoor York Stone; 300mm, 450mm, 600mm x 300mm - 1000mm random (£155/m² - £175/m²)

Paving Slabs textured; fine to medium grained sandstone; Forest of Dean Pennant /Scoutmoor York Stone; 300mm, 450mm, 600mm x 300mm - 1000mm random (£180/m² - £200/m²)

Paving Setts in Footways; fine to medium grained sandstone; Forest of Dean Pennant /Scoutmoor York Stone; 300mm x 200mm, 300mm x 150mm, 300mm x 100mm, & 200mm x 100mm (£190/m² - £210/m²)

Paving imprint setts; imprint asphalt; 300mm x 200mm, 300mm x 150mm, 300mm x 100mm, & 200mm x 100mm (Carriageway) 9 £80/m² - £100/m²)

Kerbs; granite (Special Cycle) (£80/m - £100/m)

Kerbs; granite (general standard) (£60/m - £75/m)

Cycle tracks; self coloured asphalt binder; Tarmac Uticolor or similar (£80/m² - £100/m²)

Town Standard

Paving slabs smooth; textured concrete paving with granite aggregate; 450mm x 600mm; Marshalls conservation or similar (£120/m² - £140/m²)

Smooth concrete paving with granite aggregate; 450mm x 600mm; Marshalls conservation or similar (£110/m² - £130/m²)

Textured concrete paving with granite aggregate on footways; 200mm-210mm x 100mm; Marshalls conservation or similar (£125/m² - £150/m²)

Textured concrete kerbing with granite aggregate (£40/m² - £55/m²)

Textured concrete cycle edge kerb (£65/m² - £80/m²)

Street furniture zones; resin Bound Gravel; Colas, Nataratex or similar (£75/m² - £95/m²)

Cycle tracks; self coloured asphalt binder; Tarmac Uticolor or similar (£80/m² - £100/m²)

General Standard

Paving Slabs; Concrete paving with granite aggregate; 450mm x 600mm; Charcon or Marshalls (£90/m² - £110/m²)

Paving Setts: Concrete paving with granite aggregate; 200mm x 100mm; Charcon or Marshalls (£100/m² - £120/m²)

Macadam footways - 10mm bitumen macadam, hot rolled asphalt (£55/m² - £75/m²)

Precast concrete textured kerbs (£35/m² - £50/m²)

Cycle edge kerb - precast concrete; Eco-Country side, Charcon (£55/m² - £70/m²)

Street furniture zones; resin Bound Gravel; Colas, Nataratex or similar (£75/m² - £95/m²)

Green Standard

Sealed cycle paths; town centre; resin bound surface dressing to bitumen base course; Natratex, Colas Fibredeck or similar (£75/m² - £95/m²)

Sealed cycle paths; outer areas; Ultifastpath or similar single layer bitumen macadam surface (£65/m² - £85/m²)

Unsealed surface cycle paths; recycled UltiTrec aggregate; Tarmac or similar (£45/m² - £65/m²)

Extra over above: 25mm Softwood timber edging (£10/m - £15/m)

Water access slips/steps; textured concrete or fine picked granite; paving slabs, setts, steps, slipways (TBA subject to specific detail)

9 Design Guidance for development sites within the Waterways corridor

9.1 Introduction to Design Principles

This section introduces Design Principles to guide all development alongside the Bridgwater Canal and the River Tone in Taunton from the M5 to the east and Silk Mills Park and Ride to the West.

The purpose of these Design Principles is to set clear objectives for all developments coming forward in Taunton that align with Taunton's Garden Town ambitions.

The Design Principles set out information for applicants, designers, developers, and the local planning authority to ensure that waterside development in Taunton makes the maximum contribution to the success of the town and is shaped to benefit the local community, celebrate the town's heritage and make the most of the linear green/blue asset that runs through the town.

Somerset Council should use the Design principles in support of a proactive approach to working with developers in order to deliver the types of development that the town needs, whilst achieving a step up in design quality.

Overarching Design Principles

Overarching Design Principles in section 9.2 cover all areas of Taunton and include the following topics:

- Overarching Ambitions
- Riverside Development
- Street Design

Character Area Guideline Principles

The Character Area Guideline Principles in section 9.3 set out what the character of each Character Area should be. They highlight what the area is seeking to achieve. All designs coming forward, whether a small play park or a large urban development, should follow these guidelines and endeavour to contribute to achieving these principles.

Site Design Principles

More detailed information is provided in section 9.4 for Character Area 2 - (Waterside Living (West)) and Character Area 3 (Town Centre). Within these areas are key development sites which require a more detailed level of guidance.

Waterside Living (West) is located in the Tangier area of Taunton, just west of the town centre and south east of the green spaces of French Weir Park and Longrun Meadow.

'Town Centre' is located from Goodland Gardens, along the River Tone, stretching past the Morrisons site and Cricket Ground, and including the development at Firepool.

These Site Design Principles are related to the Investment Outcomes (see chapter 2) of:

- Placemaking
- Environment & Water
- Community (including Movement/Active Travel)

The Design Principles are influenced and informed by a wide range of documents and reference should be made to the following for further information.

Planning Documents

Taunton Town Centre Area Action Plan (October 2008):

The Taunton Town Centre Area Action Plan provides the policy framework to guide the redevelopment of several important sites including Firepool, Morrisons, Tangier, Wood Street and Goodland Gardens. Whilst it is now over fifteen years old, much of the Vision and Objectives set out in the document remain relevant and admirably ambitious and aligns with the intentions of this document. This includes a strategic objective to be “A town centre that maximises the potential of the River Tone”.

Policies for these key sites are set out in the Action Plan and referenced in this document on subsequent pages that refer to the same sites. Whilst the political, economic, social and technological

environment may have changed in subsequent years, much of the key information remains relevant.

District Wide Design guide Supplementary Planning Document (2021)

The Design Guide seeks a step change in the quality of new development in support of existing adopted planning policies. It provides additional guidance on how existing adopted planning policy should be responded to in relation to securing high quality design. It sets out what is expected of developments through these existing policies, but also sets out examples beyond policy requirements for developments to consider aspiring towards. The Design Guide was adopted by the Council in December 2021 as a Supplementary Planning Document and as a material consideration in determining planning proposals and applications.

Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021):

The Public Realm Design Guide document aims to raise the standard of the public realm and streetworks across Taunton. It also seeks to increase walking and cycling and improve associated infrastructure.

Objectives are set for the public realm to be ‘green and clean, healthy and well’ and ‘quiet and slow’. Area standards are set out through four area types – Core, Town, General or Green, with materials and components set out for each area and checklists for applicants to ensure these are met.

All public realm works should accord with this document.

Taunton Green Infrastructure Strategy 2009 / Taunton Deane Green Infrastructure Opportunities Update - December 2017:

The Opportunities Update document was prepared as a follow up to the Green Infrastructure Strategy from 2009.

The document sets out how the Green Wedge Policy has been instrumental in shaping the green character of Taunton and, these have remained central in the Garden Town Vision. Through the Green Infrastructure Opportunities Update green and blue links are set out together with wider links to the Quantock Hills and Blackdown Hills National Landscape. Topics of play, biodiversity and active travel are covered through the document, as is the importance of green infrastructure in relation to climate change. The document concludes by identifying green infrastructure priorities, either location-specific or borough-wide. Figure 4.1 sets out these green infrastructure opportunities, including Enhancing Taunton's Waterways.

In addition to these planning documents other relevant documents include:

Garden Town

- Garden Town Vision and Prospectus
- Taunton Design Charter and Checklist

Design Code

- Taunton Town Centre Design Code SPD 2008

Climate and Ecology

- Climate Positive planning toolkit
- Tree Strategy
- Carbon Neutrality and Climate Resilience Action Plan (CNCR)
- Ecological Emergency Vision and Proposed Action Plan

Flood and drainage

- Taunton Strategic Flood Alleviation Improvements Scheme project (TSFAI)
- Firepool Weir Appraisal

Movement

- Somerset Rights of Way Improvement
- Connecting our Garden Communities plan
- Taunton LCWIP

Sustainable Energy

- Taunton Heat Network Masterplanning and Early Feasibility Study
- Net Zero Carbon Toolkit

Other upcoming documents include:

- Water Modelling project (~2025), refer to section 5, Character Area 4
- Local Nature Recovery Strategy, refer to sections 3 and 89.2 Overarching Ambitions

9.2 Overarching Ambitions

The Overarching Design Principles are linked to the overall Concept and Strategic Frameworks as set out in the previous section.

The three Overarching Design Principles are:

1. Creation of a Linear Water Park including public realm enhancements and improvements to sustainable transport connectivity along the water corridor to create and promote a more cohesive Waterways asset over time. Every proposed investment or development should be required to demonstrate how it contributes towards implementation of the Linear Water Park.
2. A defined network of mobility hubs of varying scales along the corridor(s) and throughout the town. To include eco-travel and community services and facilities.
3. Continuous public pedestrian, cycle and wheeling access along the Waterways by providing minimum distance segregated footpath/cycleway, also integrating smaller waterways and identifying and optimising points of connection from surrounding areas, to create coherent routes of quality.



Riverside walk

Design considerations to inform development along the water

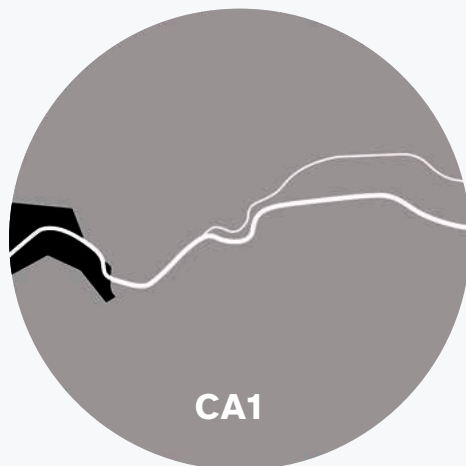
1. Improved physical public access to the water and improved visual connection to the river.
2. Existing moorings, slipways, angling points and associated facilities (e.g. toilets, showers, water and electricity points, waste collection points) should be improved.
3. All design proposals within 8m from the river edge are subject to Environment Agency consent. Refer to the Management and Maintenance Plan.
4. The riverside will generally be closed to vehicular traffic, except maintenance vehicles.
5. Development along the riverside must improve the existing riverside promenade as part of a continuous east-west link.
6. All shared public footpaths / cycleways along the riverside will need to be designed to a sufficient width in accordance with guidance in Local Transport Note 1/20 - Cycle Infrastructure Design. Designs should follow guidance in the Public Realm design guide for Taunton Garden Town Supplementary Planning Guidance. Public access to the river should be visible and safe.
7. A minimum 5m trafficable maintenance access must be maintained for access along both riverbanks, surfaced to take maintenance vehicle loading within 1m from top of bank (this can include permeable surfaces including reinforced grass or gravel). Heavy engineering solutions should be avoided where possible. (Pedestrian and cyclist routes can be used as maintenance access, if meeting the width requirement).
8. The visual relationship with the river should be improved, for example by replacing walls with railings or using stepped defences, however this objective needs to be balanced with biodiversity objectives to avoid unnecessary wildlife disturbance.
9. Cross-river pedestrian, cycle and wheeling access shall be improved through provision of new and enhancement of existing bridges. Bridges should be purpose designed for their location and provide an opportunity for high quality public realm design and public art. Bridges should be DDA compliant and have a minimum width of 3m.
10. New development should be connected to the river through strong and clear pedestrian, cycle and wheeling links.
11. Buildings should front the river to create an active and overlooked public realm. The provision of facilities such as cafés, restaurants is encouraged to increase public activity and enjoyment along the river.

12. Built form should reflect the transition of urban character from a tighter urban environment in the town centre to looser, more open development towards the urban edge. A 'softer', more natural appearance should be created in the less urbanised sections of the river.
13. Continuous overshadowing of public realm areas on the south side of the river should be avoided through appropriate building heights and breaks in built form.
14. Visibility between the promenade and the river should be improved and existing key views and viewing corridors retained. Tree planting can be used creatively to frame key views and screen unsightly views.
15. Implement a wayfinding strategy throughout the Waterway Corridor and select appropriate materials to strengthen local identity and aid wayfinding.
16. All projects brought forward should include a focus on improving biodiversity, wildlife and natural habitats along the river corridor. All projects should:
- Consider and integrate opportunities for Biodiversity Net Gain (BNG) in their design from the outset;
 - Aim to achieve a minimum of 10% BNG onsite, to be secured and delivered in accordance with an agreed management plan. If appropriate, development may be able to optimise strategic areas of BNG offsetting within the Linear Water Park;
 - Avoid impacts on irreplaceable and very high distinctiveness habitats, such as ancient woodland, ancient and veteran trees and unimproved grassland;
 - Explore all possible measures to avoid impacts on biodiversity, and adhere to the Mitigation Hierarchy (avoid - minimise - restore - offset);
- Be supported by core biodiversity gain information following the latest Defra Metric and guidance;
 - Be supported where their primary objective is to deliver BNG;
 - Seek additional measures for species and habitats enhancement (e.g. bird, bat, invertebrate infrastructure, wildlife hibernacula and lighting impacts).
17. All proposals should plan for management of water and mitigation of flood risk.
18. Where tributaries exist within or alongside a site, new proposals should consider the opportunities that exist in terms of both the practicalities of management and maintenance and placemaking. This could include deculverting a culverted tributary, providing improved access for management and maintenance, improving habitat and increasing biodiversity along the tributary, making a positive feature of the watercourse and bringing the local communities attention to the tributary.

9.3 Character Area Guideline Principles

Character Area 1: Longrun Meadow Park

Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to inform development along the water and the following Character Area specific principles:

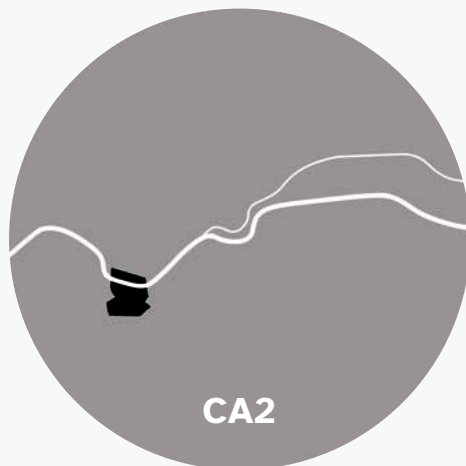


- Maintain and strengthen the semi rural meadow character
- Maintain and strengthen green links to the wider countryside
- Improvement to the routes to the west (over Silk Mills Road) to Netherclay community woodland
- Maintain and strengthen the important relationship with water – both to the Tone and as a floodplain
- Utilise the planned water storage area and relationship with French Weir Park to form a focal point and destination, working with Firepool Weir to ‘book-end’ the town centre
- Provide improvements for nature and wildlife with increased habitat, improvements for biodiversity and more tree planting
- Continue to support outdoor recreational activities and an active lifestyle, with provision for activities such as walking, cycling, watersports, play, community gatherings, without impacting nature and wildlife
- Seek ways to provide renewable energy generation
- Make opportunities for learning and education about the environment (e.g. nature, water, wildlife) in innovative ways
- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021) – and comply with the “Green standards” for public realm elements
- Refer to the District wide Design Guide SPD
- Identify space for provision of elements of a Taunton wide mobility strategy (e.g. mobility hub / e-bike hire / cycle parking / workplace showers etc)

Character Area 2: Waterside Living (West)

Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to inform development along the water and the following Character Area specific these principles:

- Proposals should contribute to the Linear Water Park concept - e.g. a strong green corridor alongside the river, pocket parks within developments and strong green links connecting them

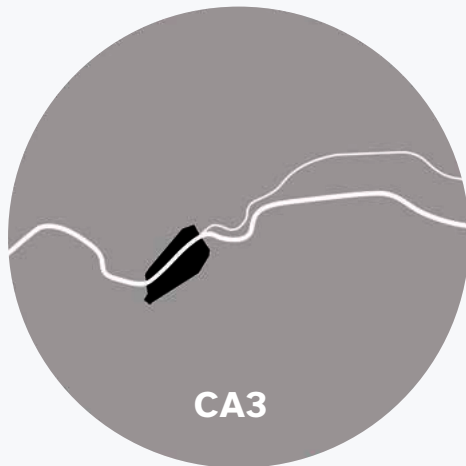


- Create a sense of arrival point into Taunton town centre
- Incorporate the waterside and former industrial character of the area whilst reflecting the character of the nearby green spaces (Longrun Meadow and French Weir Park), with a careful balance of urban and green space
- Give a strong presence to water – with strong relationships to the Tone, Mill Stream, de-culverting of streams and provision of visible SuDS, habitat creation and water play
- Provide active frontage, overlooking (i.e. roof terraces) and generous public spaces along the watercourses with opportunities for activity (e.g. café, small businesses, play)
- Generous green corridors alongside watercourses, providing for improved nature and wildlife with increased habitat and improvements to biodiversity, and where appropriate tree planting
- Provide active travel routes through the site, especially along the River Tone connecting between Longrun Meadow and the town centre
- Provide for improved water access for people, without impacting nature and wildlife
- Incorporate strong routes through new development for people to get to and along the waterside
 - Make sure the public realm is a place for people, with a community focus (e.g. places to sit, meet, gather and play) and strong greening (e.g. raingardens and tree planting). Make provision within public realm for events to take place, for meanwhile uses and community uses that help to celebrate the town's relationship with the water
- Seek ways to provide renewable energy generation
- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021) – and comply with the “Town standards” for public realm elements
- Refer to the District-wide Design Guide SPD

Character Area 3: Town Centre

Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to inform development along the water and the following Character Area specific these principles:

- Proposals should contribute to the Linear Water Park concept - e.g. a strong green corridor alongside the river, pocket parks within developments and strong green links connecting them



- Strengthen and build upon what already exists within the town centre including green spaces such as Goodland Gardens, public space at Taunton Castle, retail within the town centre, the Brewhouse Theatre and the Cricket Ground
- Character within this area should reflect the heritage of key sites - e.g. the old town Town Bridge, wharfs, industrial heritage and crafts of the area. Proposals should be appropriate to the town centre location – with appropriate density, building height and massing – with grain and permeability to encourage pedestrian movement and connections to the river.
- Generous green corridors alongside watercourses, providing for improved nature and wildlife with increased habitat and improvements to biodiversity, and where appropriate tree planting
- Give a strong presence to water – with strong relationships to the Tone including public spaces overlooking it and bridges over it, and provision of visible SuDS and water play
- Provide active travel routes along the River Tone and connecting through Firepool to the train station and linking to the historic centre and new development sites at Tangier
- Incorporate strong routes through any development for people to get to and along the waterside
- Identify space for provision of elements of a Taunton wide mobility strategy (e.g. mobility hub / e-bike hire / cycle parking / workplace showers etc)
- Provide active frontage, overlooking (e.g. roof terraces) and generous public spaces along the Tone with opportunities for activity (e.g. café, small businesses, play)
- Make sure the public realm is a place for people, with a community focus (e.g. places to sit, meet, gather and play) and strong greening (e.g. raingardens and tree planting)
- Make provision within the public realm for events to take place, for meanwhile uses and community uses that help celebrate the town's relationship to water
- Seek ways to provide renewable energy generation

- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021) – and comply with the “Core standards” for public realm elements
- Refer to the District-wide Design Guide SPD.

Character Area 4: Waterside Living (East)

Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to



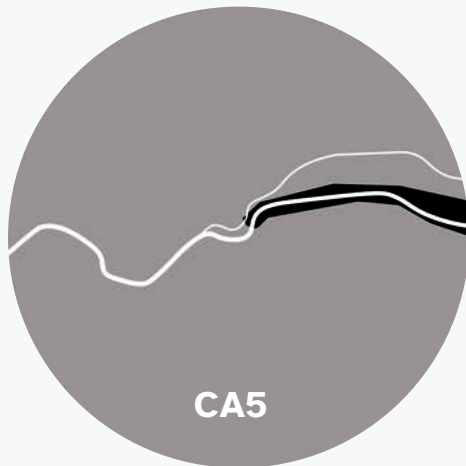
inform development along the water and the following Character Area specific these principles:

- Proposals should contribute to the Linear Water Park concept - e.g. a strong green corridor alongside the river, pocket parks within developments and strong green links connecting them
- Form an arrival point into Taunton town centre
- Incorporate the waterside and former industrial character of the area with a careful balance of urban and green space
- Optimise the Weir and Pumphouse as a focal point and destination for visitors to the town centre
- Give a strong presence to water – with strong relationships to the Tone and canal and provision of visible SuDS and water play
- Provide active frontage (as at Firepool Lock), overlooking and generous public spaces along the watercourses with opportunities for activity (e.g. café, small businesses, play)
- Generous green corridors and green spaces alongside watercourses, providing for improved nature and wildlife with increased habitat and improvements to biodiversity, and where appropriate tree planting
- Provide active travel routes along the River Tone and canal and connecting to the train station
- Provision for improved water access for people, without impacting nature and wildlife
- Incorporate strong routes through any development for people to get to the waterside
- Make sure the public realm is a place for people, with a community focus (e.g. places to sit, meet, gather and play) and strong greening (e.g. raingardens and tree planting)
- Make provision within the public realm for events to take place, for meanwhile uses and community uses that help to celebrate the town’s relationship with the water
- Seek ways to provide renewable energy generation

- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021).
- Refer to the District-wide Design Guide SPD.

Character Area 5: River corridor

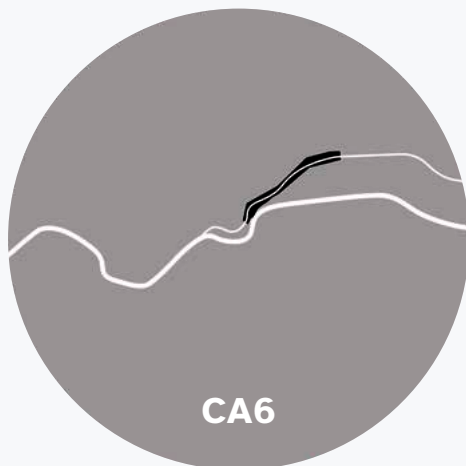
Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to inform development along the water and the following Character Area specific these principles:



- Be responsive and sensitive to the Hankridge Nature Reserve
- Maintain and strengthen the semi rural character of the green spaces adjacent to the river (with occasional adjacent relationships with nearby buildings)
- Maintain and strengthen the important relationship with the Tone, with potential channel improvements and reprofiling
- Maintain and strengthen green links to the wider countryside
- Provide improvements for nature and wildlife with increased habitat, improvements for biodiversity and more tree planting (including in the floodplain)
- Continue to support outdoor recreational activities and an active lifestyle, with provision for activities such as walking, cycling, watersports, play, community gatherings and events, without impacting nature and wildlife
- Optimise Children's' Wood as a community asset and improve pedestrian crossing facilities over the river at Childrens' Wood (raised walkways)
- Make opportunities for learning and education about the environment (e.g. nature, water, wildlife) in innovative ways
- Seek to improve relationship (frontage, connectivity, overlooking) with buildings to the south
- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021) – and comply with the “Green standards” for public realm elements
- Refer to the District-wide Design Guide SPD.

Character Area 6: Urban canal

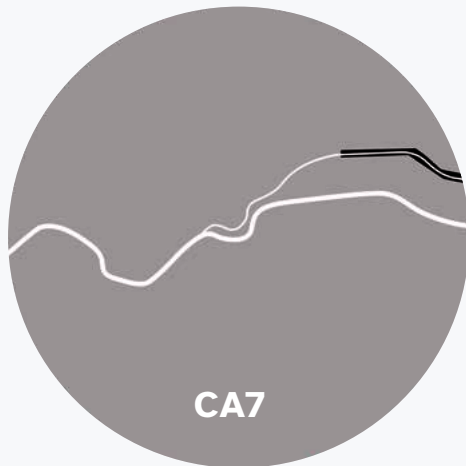
Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to inform development along the water and the following Character Area specific these principles:



- Maintain and improve Active Travel routes along the canal, including mobility hubs, cycle parking and provision at employment sites to encourage Active Travel
- Generous green corridors alongside watercourses, providing for improved nature and wildlife with increased habitat and improvements to biodiversity, and where appropriate tree planting
- Provide improved water access for people for activities such as kayaking and angling (including mooring of boats), without impacting nature and wildlife
- Improved relationship with employment sites along the canal with additional access points, stronger overlooking, public spaces for employees to access (e.g. for lunch breaks)
- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021).
- Refer to the District-wide Design Guide SPD.

Character Area 7: Rural canal

Designs within this Character Area should follow the three Overarching Design Principles, the Design considerations to inform development along the water and the following Character Area specific these principles:



- Maintain and strengthen the semi rural character
- Maintain and strengthen green links to the wider countryside
- Maintain and improve Active Travel routes along the canal
- Make improvement to the routes to the east (under the M5)
- Generous green corridors alongside watercourses, providing for improved nature and wildlife with increased habitat and improvements to biodiversity, and where appropriate tree planting
- Provision for improved water access for people for activities such as kayaking and angling (including mooring of boats), without impacting nature and wildlife
- Refer to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021) – and comply with the “Green standards” for public realm elements
- Refer to the District-wide Design Guide SPD.



Rural canal

9.4 Site Design Principles: Character Area 2 - Waterside Living (West)

9.4.1 Overview

Context and Background

CA2 Waterside Living (West) is located in the Tangier area of Taunton, just west of the town centre and south east of the green spaces of French Weir Park and Longrun Meadow. The River Tone and Mill Stream diverge at French Weir and reconverge at Town Bridge effectively creating a physical island that is part of the site.

Waterside Living (West) plays a key role in providing connections between Longrun Meadow and the town centre, in making improvements to waterside connection and creating an improved arrival point into the town centre.

The area has great potential in terms of its historic character and riverside setting, town centre location, proximity to key growth areas such as the University Centre Somerset and Musgrove Park Hospital, as well as the scale of its development opportunities.

This area is covered by Taunton Town Centre Area Action Plan 'Tangier' TG2, Sites 1, 2, 3, 4, 5 and 8.

Key Design Principles

- Waterside living
- Active frontage to the River Tone and Mill Stream
- Strong active travel connectivity along the water's edge
- Revealing industrial heritage, including Mill Stream
- Connected to nature
- Draw water through the development sites
- Create positive connections between the town centre and the French Weir Park destination.

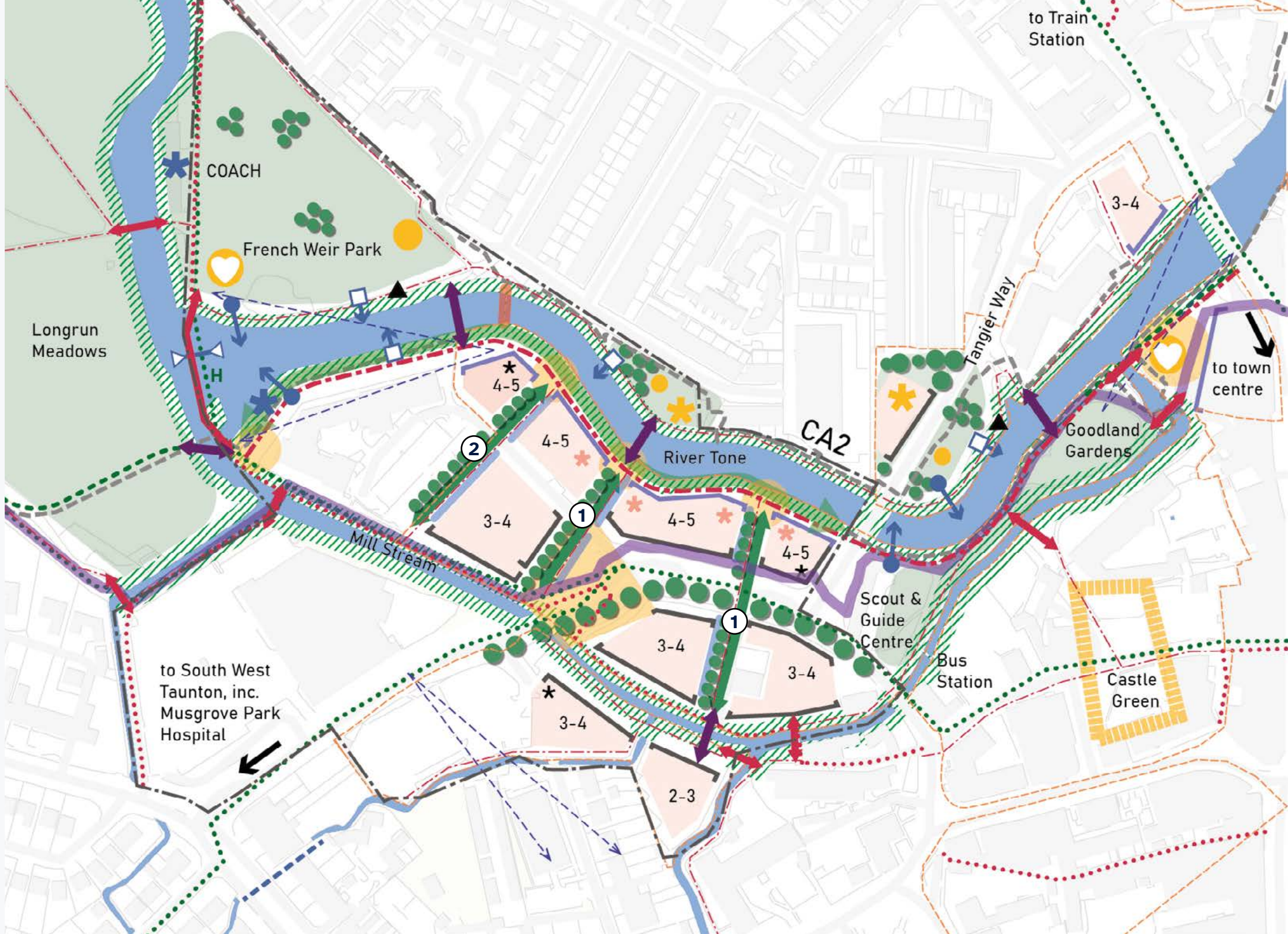
Key site considerations

- River Tone and Mill Stream and water management challenges and opportunities of connecting the two through development sites
- Connections to Longrun Meadows, French Weir Park and town centre
- Located in flood zone 3
- Possible contamination on former industrial site


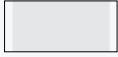


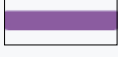



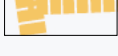
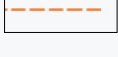

Site allocation policy - Tangier sites





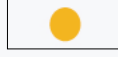

Aerial Photography - World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN and the GIS User Community. World Hillshade: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS User Community.






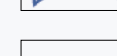




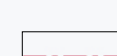
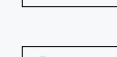



Existing

-  Watercourse
-  Buildings
-  Pedestrian/cycle bridge
-  Cycle route
-  Sustrans National Cycle Route
-  Public Right of Way
-  Flood Defences
-  Service pipe (to remove) MM9
-  Public Space
-  Town Centre Action Plan Policy Areas
-  Slipway

Proposed

-  Area of opportunity for destination
-  Proposed or improved public space
-  Proposed or improved play space
-  Development - Housing led, with roof terraces

-  Development - Housing led, with roof terraces
-  Maximum storey height/focal point
-  Location for key active frontage
-  Location for key enhanced frontage (e.g. 'front' doors, overlooking, active facades of residential or commercial properties)
-  Views to St. John's church, the Weir, Town Bridge
-  Character Area
-  Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space
-  Proposed or improved Green Spaces
-  Proposed Riverside Green Connections
-  Proposed Green Connections (main/secondary) with SuDS (e.g. raingardens, swales) & trees
-  Proposed tree planting

-  Potential for Hydropower and Water Source Heat Pumps
-  Potential to deculvert watercourses to south
-  Fish pass
-  Proposed SuDS
-  Proposed cycle route
-  Proposed pedestrian / cycle bridge
-  Proposed Primary Active Travel Route
-  Proposed Secondary Active Travel Route
-  Indicative water launch location
-  Indicative watersport facility location
-  Indicative angling location
-  Proposed meanwhile use (e.g. cultural, arts, creative industries, innovation hub, pop-up)
-  Proposed community use or small local business

9.4.2 Placemaking

Character

1. Waterside Living (West) should have a locally distinctive identity reflecting the industrial heritage of site and its waterside location.
2. Proposals should demonstrate a commitment to the creation of an attractive, vibrant waterfront at every stage in the design process.
3. Proposals should be distinctive - integrating contemporary, innovative architecture with the historic environment to reveal and celebrate the historic layers, including the water management structure.
4. Proposals should express the informal, leafy waterside character of the area through the architecture and planting.
5. Proposals should create a place to live that allows great access to water and nature, whilst the convenience of being on the doorstep of the town centre for work or leisure.
6. The viability of small floating commercial units moored alongside the Tangier site should be considered.

Housing Led Development

1. Waterside Living (West) should provide housing led development that is predominantly residential with a small amount of mixed use (e.g. cafés, work hub, pub) integrated on the ground floor of mixed development blocks.
2. Waterside Living (West) should provide for an inter-generational community, through the provision of a range of types of homes.
3. Smaller mixed use units should be located along the River Tone frontage.
4. Large urban blocks should be avoided, and a finer urban grain established, to increase permeability through sites and to the river.
5. Street level façades should be activated with appropriate uses (such as retail, café, gallery etc.) on ground floors to provide passive surveillance and create safe and welcoming spaces.
6. Active frontage should be provided along all waterfronts and streets.



CA1: Distinctive identity reflecting industrial heritage

Public Spaces

The distribution of public spaces should reflect the overarching principles of the Linear Water Park Concept which will establish the core functions of spaces and communications that combine to form the Linear Water Park.

1. Allow for movement - Development proposals should establish clear routes through the space to enable people to pass directly from A to B, in line with the movement hierarchy.
2. Spaces should be easy to navigate – with a framework for movement provided by strong east-west and north-south routes, strong waterside edges with active frontage and elevational treatment, key public spaces along the River Tone, strong active travel routes, key buildings at key corner to aid legibility.
3. New public spaces should be located on key routes and which are well overlooked, with adjacent active frontage or community uses.
4. Public spaces should connect to a network of green routes through the development, which should provide opportunities for interaction across all age groups with plenty of opportunities to meet with neighbours in shared spaces. These green routes should be pedestrian friendly with traffic measures to aid driver awareness of pedestrians and street activities.
5. Provide for different activity - design nodes of activity should be complemented by ‘resting’ zones facing the space. Outdoor catering is encouraged around the edges of a space to animate the public realm.
6. Public spaces and green spaces should provide new play space, with a small play space alongside Clarence Street to provide for ‘doorstep play’.
7. Design for all - the design of spaces should build in a degree of versatility so that they enable people to enjoy different activities in the same space and can be used for a variety of uses over time. Design should take account of different user group and should adequately integrate facilities for the elderly, disabled and children.
8. Spaces should be uncluttered, robust and safe. Specifications of materials and maintenance regimes must demonstrate high standards of visual quality, durability and environmental performance. Spaces should be laid out so that their functions are clear without the need for unnecessary signs or barriers.
9. Open space design should seek opportunities to incorporate BNG through use of appropriate planting to compliment the public use function of the spaces (wildflower lawn, wetlands, trees) and incorporate infrastructure for protected species (bat and bird boxes, hibernacula).
10. Opportunities for green space should be maximised, and tarmacked areas should be minimised to strengthen the contribution of public spaces to reducing embodied carbon and improving biodiversity.
11. Reference should be made to the Public Realm Design Guide for Taunton Garden Town, Supplementary Planning Document (December 2021)
12. Public art should be included within public open space as a landmark and as a wayfinding element.



PS4: A network of green routes

Building Heights

1. Building height, scale and massing should be appropriate to the location.
2. Well considered building heights and active frontage provide an opportunity to create a development that provides positive interaction in many ways – life where you chat with your neighbour in the street, relax in the terraced communal garden overlooking the river or grab a coffee in the local café.
3. Storey heights should reduce to the south adjacent to smaller dwellings.
4. Solar access should be ensured to the streams and river through reduced building heights, adequate front garden offsets and breaks in the built frontage
5. Building heights should consider important views – for example to St John’s Church, the Weir and the Town Bridge.

Elevational treatment

1. Elevations along River Tone should be designed to provide variety and interest (rather than one monotonous elevation), with the possibility for differing setbacks to provide smaller scale meeting places along the river. This should be supported by a varied roofscape and roof terraces.
2. Where possible boundaries to adjacent properties should be open, or defined by planting or a low ‘open’ fence, rather than tall solid fencing in order to provide visual connections and overlooking of the waterways.

Parking

1. Low levels of parking are expected in very accessible town centre location. Parking and service access should be located to be discrete; generally internal to development blocks or on street.

Retained access





1. Access should be maintained to buildings next to French Weir and to Parkhaven.



EL1: Variety and interest in elevations

9.4.3 Environment and Water

Existing

-  Watercourse
-  Buildings
-  Pedestrian/cycle bridge
-  Slipway

Proposed

-  Character Area
-  Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space
-  Proposed or improved Green Spaces
-  Proposed Riverside Green Connections
-  Proposed Green Connections (main/secondary) including SuDS (e.g. raingardens, swales) and trees
-  Proposed tree planting
-  Proposed pedestrian/cycle bridge
-  Potential to deculvert watercourses to south
-  Fish pass
-  Proposed SuDS
-  Indicative water launch location
-  Indicative watersport facility location
-  Indicative angling location

① ②

Water Corridors and Nature

1. Waterside Living (West) should create well maintained and enhanced River Tone and Mill Stream corridors, with a continuous waterside wildlife and landscape corridor - providing a river edge treatment that encourages interaction with water and creates nature-based solutions that create active spaces, improve health and well-being and are positive for both the environment and economy. This should provide a minimum 8m riparian zone, to maintain access, create habitat for wildlife and provide green spaces and trees along the watercourse. Soft engineering options should be provided with increased bank side vegetation encourage biodiversity, with tree cover along the river corridor.
2. Service access should be maintained along the river and stream for maintenance. To minimise hard surfaces adjacent to the river, the pavement and/or cycle route should meet the requirements for a service route and may be used as such when necessary.
3. Connections to French Weir Park, Longrun Meadow and Goodland Gardens should be maintained and improved alongside the River Tone and Mill Stream.
4. Proposals should be assessed by Building with Nature and should meet Nature Core Standards, Well-being Standards, Water Standards and Wildlife Standards.
5. A fish pass should be provided at French Weir.
6. Achieve at least the mandatory 10% Biodiversity Net Gain with the ambition for a higher percentage - refer to Somerset Council Biodiversity Net Gain Guidance Note (February 2024).
7. Development will take account of the Nature Recovery Plan.
8. Proposals should reflect the different character of the north and south banks of the river, with the north having a more natural character (offering opportunities for biodiversity and ecology according to the Waterways Biodiversity Framework) and the south more urban.

Connections to watercourses

1. Water should be visible so that residents and visitors experience a connection, a positive relationship and understanding of the importance of water to their urban environment and sense of place.
2. Waterside Living (West) should provide a minimum of three multi-functional green connections; that provide good permeability and clear links between new development areas to both the River Tone and Mill Stream. These should include SuDS – for example raingardens or swales and tree planting, as well as prioritising pedestrians, cyclists and wheeling.

Access to Water

1. Better access to the River Tone should be provided - proposals should include locations for watersport facilities and angling platforms; with new launch points at key locations for boating, canoeing etc. and key facilities such as boat storage and changing facilities and toilets.



WCN6: Improvements for biodiversity

Larger facilities, to expand access to the water and provide supplementary facilities to TASC, should also be considered.

2. The French Weir Combined Project will determine its future form and function. A lock structure could allow for navigation further upstream.

Tree planting

1. Opportunities should be taken along key routes to increase tree planting, including street trees, orchards and trees within green spaces. Trees should be in keeping with the local character and it should be ensured that the local environment is suitable for them. This will be informed by the Biodiversity Framework.
2. Proposed trees including street trees along Tangier Way, trees within green links and new trees in existing and proposed green spaces.
3. Trees should be native (unless there are overriding reasons) and once established, should be allowed to mature with little or no impact

from humans, i.e. should not be subject to pruning or management regimes unless in the interest of public safety. Trees should be planted in groups where possible with complimentary landscaping to maximise ecological value.

4. Tree pits should be sufficient and large enough to support tree growth.
5. Trees should be incorporated into plazas and areas with extensive hard surfaces.
6. Tree canopies should cover large areas.

SuDS

1. Ensure high-quality SuDS and water management with the creation of a multitude of green SuDS throughout to give opportunities for community spaces and/ or water play and contribute towards improved water quality.
2. Design for greener streets prioritising SuDS and permeable surfacing over tarmac / concrete and piped drainage.
3. Incorporate permeable surfaces and where possible rain gardens.

Energy




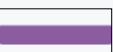
1. Buildings should meet with the requirements of Somerset West and Taunton's Net Zero Carbon Toolkit in relation to energy efficiency, low carbon heating, renewable energy generation and embodied carbon.
2. The potential should be explored for site wide energy solutions, e.g. Hydropower powered by the weir and Water Source Heat Pumps.
3. Energy demand should be minimised, by careful building orientation optimised to balance solar gain and increase south facing roof area.
4. Proposals should engage with Taunton's early techno-economic feasibility work on the mapping of heat network opportunities (demands, heat sources, energy centre locations) at an early stage
5. Opportunities should be taken for homes to include battery storage with onsite renewable generation, to maximise the benefit to the homeowner.



CTW1: Multi-functional green connections

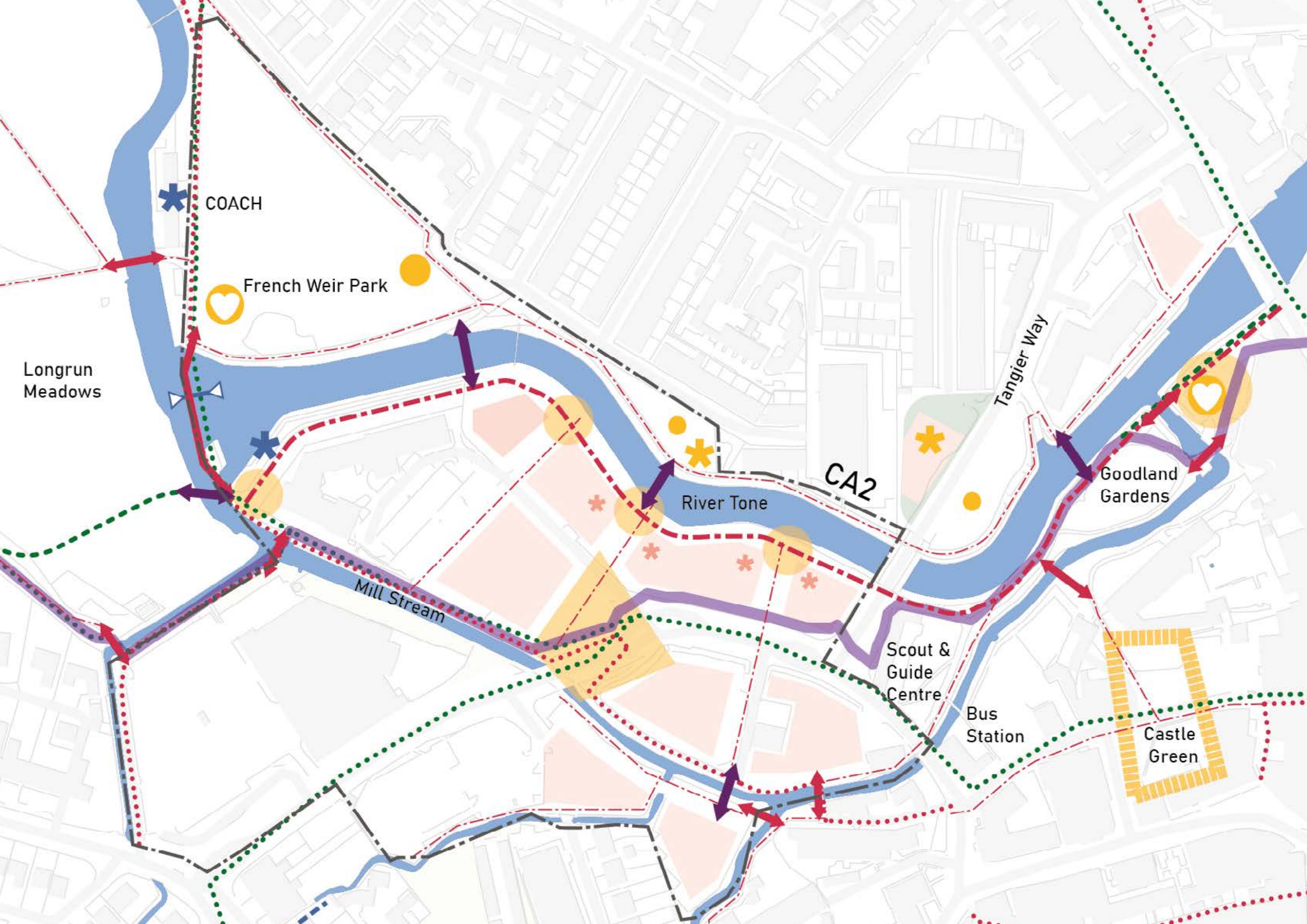
9.4.4 Community

Existing

	Watercourse
	Buildings
	Pedestrian/cycle bridge
	Cycle route
	Sustrans National Cycle Route
	Public Right of Way

Proposed

	Area of opportunity for destination		Indicative water launch location
	Proposed or improved public space		Indicative watersport facility location
	Proposed or improved play space		Indicative angling location
	Development - Housing led, with roof terraces		Proposed meanwhile use (e.g. cultural, arts, creative industries, innovation hub, pop-up)
	Character Area		Proposed community use or small local business
	Proposed cycle route		
	Proposed pedestrian / cycle bridge		
	Proposed Primary Active Travel Route		
	Proposed Secondary Active Travel Route		



COACH

French Weir Park

Longrun Meadows

River Tone

CA2

Tangier Way

Goodland Gardens

Mill Stream

Scout & Guide Centre

Bus Station

Castle Green

Enhancing Active Travel

1. Taking an 'Active Travel' first approach, in this town centre location which is walkable to most facilities and near the bus station and bus stops. Pedestrians, cyclists and wheeling should be prioritised and promoted, with vehicle ownership dissuaded in an area with such good public transport links. Cycle storage should be generously provided, and car parking limited to schemes such as carshare and electric pool cars.
2. A Primary Active Travel Route should run along the south bank of the River Tone providing good east-west connectivity connect to French Weir Park & Longrun Meadow to the west and the Goodman Gardens, town centre and onto Firepool and the railway station to the east. Improvements should be made to the pedestrian, cycle and wheeling routes along the length of the river with improved access and widening in some parts to create an overlooked footpath and cycleway.
3. Existing cycle routes and the long distance Sustrans route 3 (from Land's End through Taunton to Bristol) should be retained and reinforced, with minor enhancements by Debenhams and the Weir to improve connectivity.
4. Secondary Active Travel Routes plus new bridge crossings for pedestrians, cyclists and wheeling should ensure permeability through the area and ensure routes alongside the water. Bridge design should be used as an opportunity to strengthen local identity.
5. Design for cyclists - proposals should follow the guidance in Local Transport Note 1/20 - Cycle Infrastructure Design. Designs should follow guidance in the Public Realm design guide for Taunton Garden Town Supplementary Planning Guidance.

Supporting Activity

1. Waterside Living (West) should provide locations for meanwhile and seasonal uses e.g. cultural, arts, creative industries and leisure, to support the growth of new businesses in Taunton.
2. Provide areas for community use and small local business to foster and encourage the development of a close-knit community.
3. A foot/cycle bridge connection to Clarence Street should be provided to strengthen the relationship with the existing community to allow shared use of facilities and / community spaces.
4. Engagement should take place with local interested groups such as the residential communities to north and south, Tangier Scout and Guide Centre and Taunton Adventurous Sports and Canoe Club.



SA1: Supporting growth of new businesses

9.4.5 Design Briefs

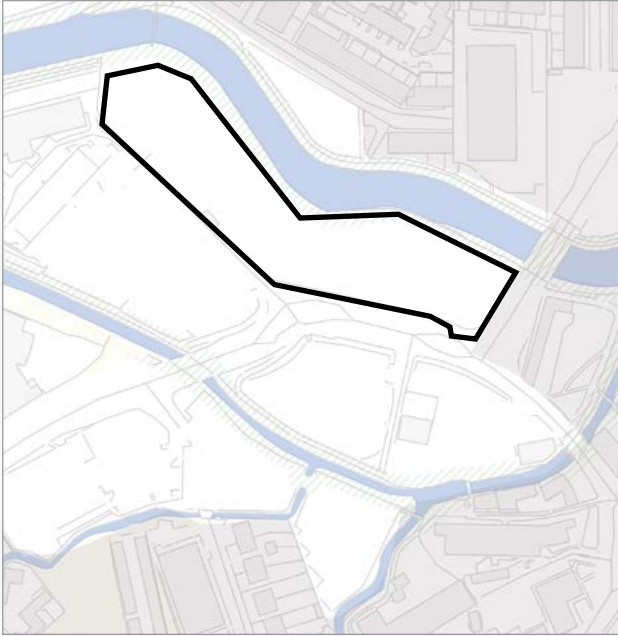
Tangier Policy TG2 / Site 1

(Sites bounded by Wood Street, Greenbrook Terrace and the River Tone) - Residential only, allocated for 225 residential units

Existing

Sustrans National Cycle Route 3: Retain and enhance along Tangier Way

Service Pipe: Investigate removal (at north of site across River Tone)



Placemaking

Proposed public space: Creation of minimum three public spaces alongside River Tone as part of riverside improvements, at connection points with north-south green connections as part of linear route and to enhance the establishment of French Weir Park as a destination.

Proposed play space: Provide doorstep play within green connections and/or roof terraces as well as developing bridge connections to French Weir Park and green space alongside Clarence Road, with appropriate long term stewardship.

Development: Housing led, predominantly residential, with coordinated urban design across all Tangier sites. Active frontage to the water and key streets including roof terraces.

Maximum storey height: 4-5 storeys with variety of roofscape and key focal points at most northerly point and as Tangier Way turns to cross the River Tone

Location for key active frontage: North-east edge alongside the River Tone and onto Tangier Way, and improved natural surveillance over Mill Stream.

Environment and water (Green & Blue)

Watercourse: Retain and enhance existing access to River Tone. Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space

Proposed Riverside Green Connections: Strong linear green space alongside River Tone and Mill Stream accommodating movement (active travel) and providing attractive waterside public open space with generous planting

Proposed Green Connections: Minimum 3 no. north-south connections to create a permeable development with strong pedestrian, cycle and wheeling connections between Mill Stream and the River Tone, Connections to include SuDS (e.g. raingardens, swales) and trees

Proposed tree planting: generous tree planting within Green Connections

Proposed Green Spaces: Riverside Green Connection

Community

Proposed bridges: Minimum 1 no. pedestrian/cycle/wheeling bridge with aspiration for 2 no. to connect across River Tone - one to French Weir Park, one to Clarence Street

Proposed Active Travel Routes: Primary Route to run alongside River Tone and Secondary Routes to run through Green Corridors

Proposed water launch location: Minimum 1 no. launch point onto River Tone to be created

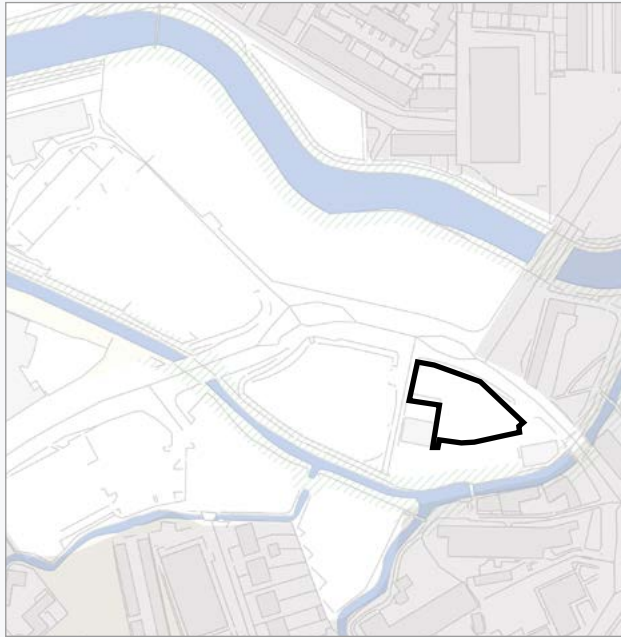
Locations for watersport facilities: Explore potential for northern most area of site to provide complementary uses to The Centre for Outdoor Activity & Community Hub (COACH)

Proposed locations for angling: Explore best locations for angling provision, suggest north bank within green spaces

Proposed meanwhile use: Explore potential meanwhile uses within green space by Clarence Street

Proposed community use or small local business: provide space adjacent key proposed public spaces for these uses

Proposed artwork: Potential for public art along the river / at the connections of the river promenade and routes to the river



Tangier Policy TG2 / Site 2

Mix of uses, allocated for 50 residential units and retail

Existing

Buildings: Retention of existing adjacent building (and access)

Cycle Route: Retain existing cycle route along Tangier Way

Placemaking

Development: Housing led, predominantly residential, with coordinated urban design across all Tangier sites.

Maximum storey height: 3-4 storeys

Location for key active frontage: Tangier Way



Environment and Water (Green & Blue)

Proposed Green Connections: North-south connections to west of site to create a permeable development with strong pedestrian, cycle and wheeling connections to the River Tone and Mill Stream, connections to include SuDS (e.g. raingardens, swales) and trees

Proposed tree planting: Within green connection and street trees along Tangier Way

Community

Active Travel Routes: Secondary routes to run through Green Corridor



Tangier Policy TG2 / Site 3

Mix of uses, allocated for 60 residential units and retail

Existing

Road: Potential to consider how Tangier Way runs through public space

Cycle Route: Retain existing cycle route along Tangier Way

Public Right of Way: Retain alongside Mill Stream

Placemaking

Development: Housing led, predominantly residential, with coordinated urban design across all Tangier sites.

Maximum storey height: 3-4 storeys

Location for key active frontage: Alongside Mill Stream and onto Tangier Way

Environment and Water (Green & Blue)

Watercourse: Retain and enhance existing Mill Stream. Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space

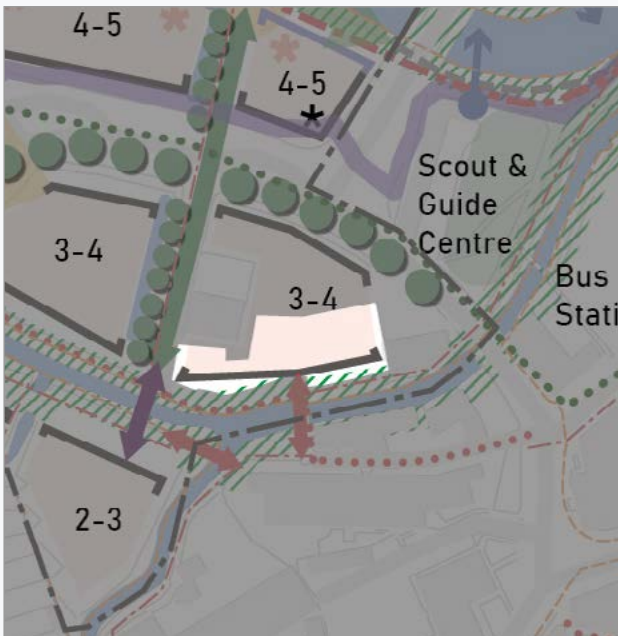
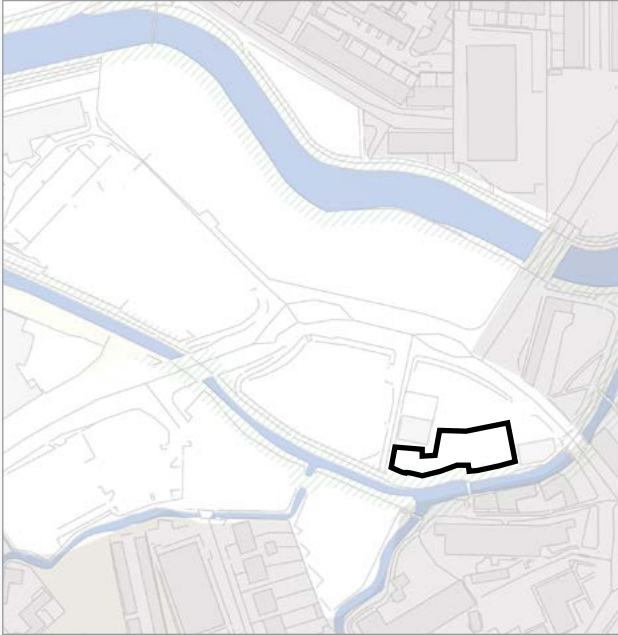
Proposed Green Connections: North-south connections to east of site to create a permeable development with strong pedestrian, cycle and wheeling connections to the River Tone and Mill Stream, connections to include SuDS (e.g. raingardens, swales) and trees

Proposed tree planting: Within green connection and street trees along Tangier Way

Community

Proposed pedestrian/cycle/wheeling bridge: To connect at south-east corner of site over Mill Stream

Active Travel Route: Secondary Routes to run through Green Corridor



Policy TG2 / Site 4

Residential only, allocated for 20 residential units

Existing

Buildings: Retention of existing building (and access)

Public Right of Way: Retain along Mill Stream

Placemaking

Development: Housing led, predominantly residential, with coordinated urban design across of Tangier sites.

Maximum storey height: 3-4 storeys

Location for key active frontage: Mill Stream

Environment and Water (Green & Blue)

Watercourse: Retain and enhance existing Mill Stream. Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space

Proposed Green Connections: North-south connections to west of site to create a permeable development with strong pedestrian, cycle and wheeling connections to the River Tone and Mill Stream, connections to include SuDS (e.g. raingardens, swales) and trees

Proposed tree planting: Within green connection

Community

Proposed pedestrian/cycle/wheeling bridge: To connect at south-west corner of site over Mill Stream

Proposed Active Travel Route: Secondary Route to connect from PROW into Goodland Gardens



Policy TG2 / Site 5

Residential only, allocated for 60 residential units

Existing

Buildings: Appropriate edge to existing buildings to south

Road: Potential for connection to St John's Road

Cycle Route: Retain existing route along Tangier Way

Placemaking

Development: Housing led, predominantly residential, with coordinated urban design with the Tangier sites.

Maximum storey height: Varied from 2-4 storeys

Location for key active frontage: Onto Mill Stream and Tangier Way

View to St John's church: Maintain views

Environment and Water (Green & Blue)

Watercourse: Retain and enhance existing Mill Stream. Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space.

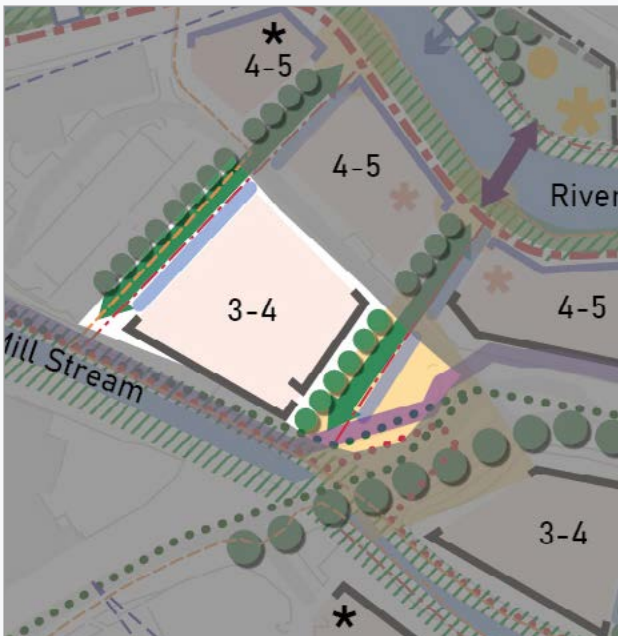
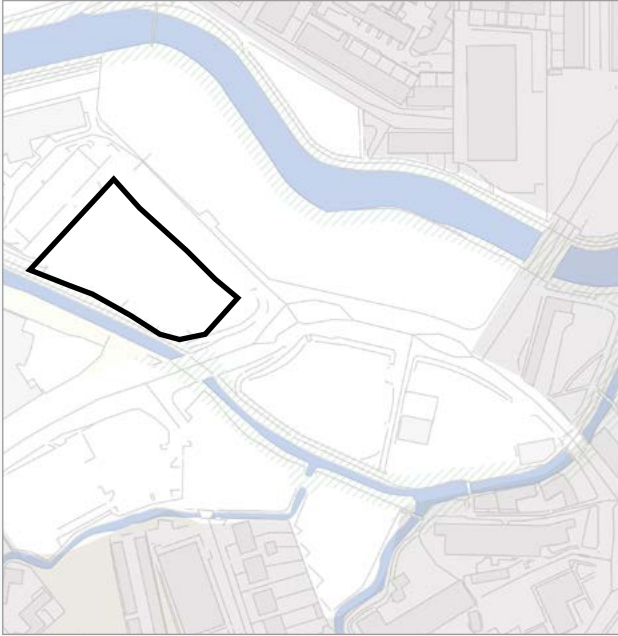
Tributaries: Reveal the points at which the two tributaries join the Mill Stream, optimising the opportunity to improve connection between the town centre, Linear Water Park and adjoining neighbourhoods by means of water connections.

Proposed tree planting: Street trees along Tangier Way

Community

Proposed pedestrian/cycle/wheeling bridge: Over Mill Stream to join green connection towards River Tone

Active Travel Routes: Secondary routes along Mill Stream and adjoining watercourse



Policy TG2 / Site 8

Mix of uses, allocated for 50 residential units and retail

Existing

Buildings: Retained buildings to north-west

Road: Tangier retained to access buildings to north-west

Cycle Route: Retain route around south of site

Sustrans National Cycle Route 3: Retain route around south of site

Public Right of Way: Retain route around south of site

Placemaking

Proposed public space: to south of site

Development: Housing led, predominantly residential, with coordinated urban design with the Tangier sites

Maximum storey height: 3-4 storeys

Location for key active frontage: Mill Stream and Tangier Way

Environment and Water (Green & Blue)

Watercourse: Retain and enhance existing Mill Stream. Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space.

Proposed Green Connections: North-south connections to north-west and south-east of site to create a permeable development with strong pedestrian, cycle and wheeling connections to the River Tone and Mill Stream, connections to include SuDS (e.g. raingardens, swales) and trees.

Proposed tree planting: within green connections

Community

Proposed Active Travel Routes: Secondary routes through green connections



Tangier site



Taunton Town Bridge

9.5 Site Design Principles: Character Area 3 - Town Centre

9.5.1 Overview

Context and Background

CA3 'Town Centre' encompasses Goodland Gardens, Town Bridge and Coal Orchard, extending eastwards, past the Morrisons site and Cricket Ground, and including the development at Firepool.

The Character Area plays a key role in providing connections through the town centre, and strengthening the vibrancy of the town centre, particularly with the potential redevelopment of the Morrisons site.

The area has potential in terms of its historic character and riverside setting, town centre location, good connections and accessibility, proximity to recent growth areas such as Firepool and Coal Orchard, as well as the scale of its development opportunities.

This area is covered by Taunton Town Centre Area Action Plan 'Morrisons' CR5, Debenhams G2 (within Goodland Gardens) and Wood Street TG1, sites 2,3 and 4.

Key design principles

- Waterside living
- Strong active travel connectivity
- Strong relationship with Coal Orchard and Firepool
- New 'retail quarter' with potential to strengthening existing retail but encouraging footfall through the site
- Reveal the historic relationship between the town centre and the river

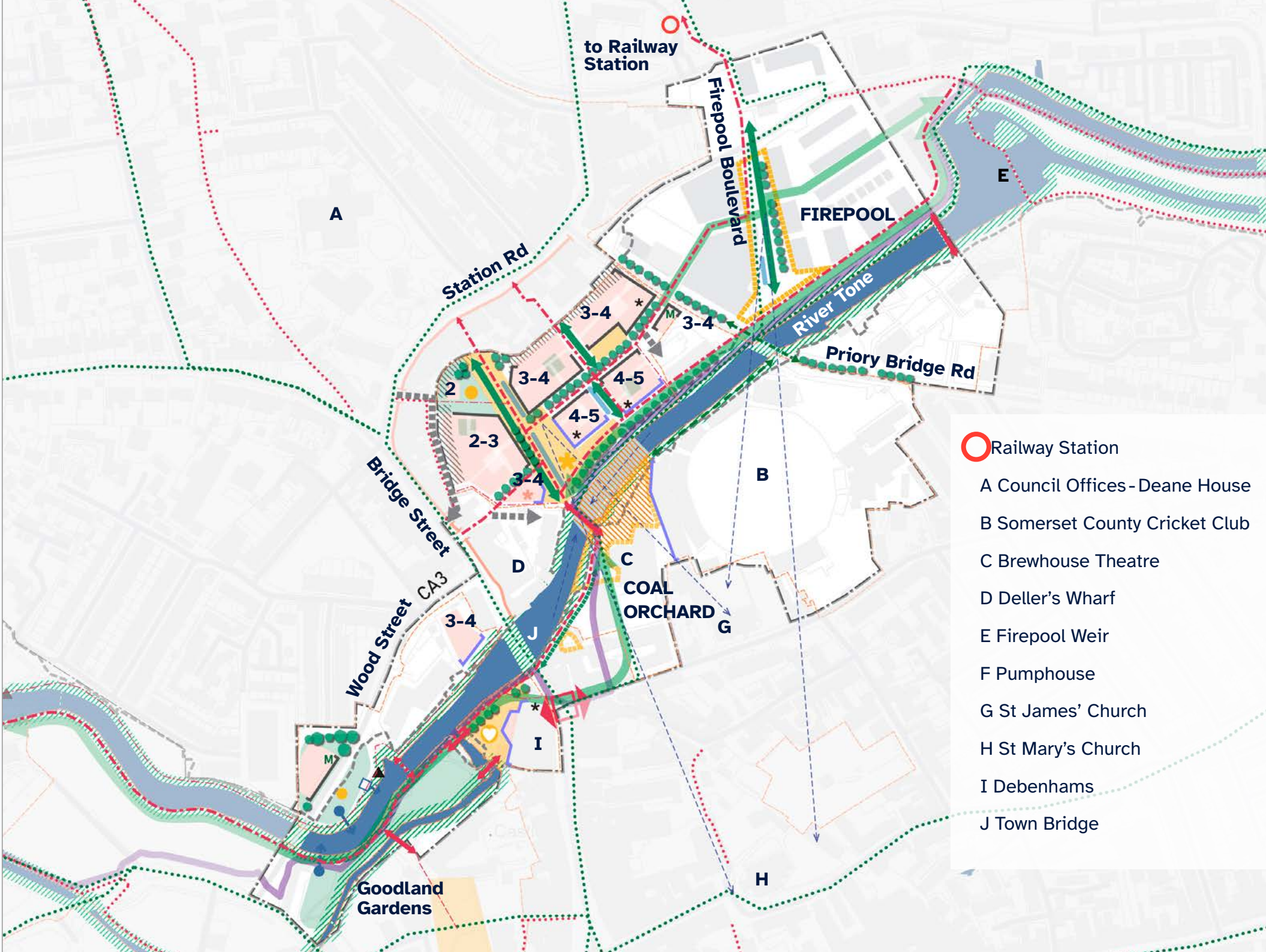
Key site considerations:

- Management of the River Tone and Mill Stream
- Circular connection through site including Station, Firepool and historic Taunton High Street
- Located in flood zone 3
- Adjacent Firepool development and Brewhouse Theatre
- Historic water-related infrastructure assets
- The international draw of the Somerset County Cricket Ground

Site allocation policy - Firepool, Morrisons, Cricket Club, Coal Orchard and Wood Street sites


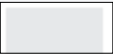


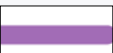









Aerial Photography - World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN and the GIS User Community. World Hillshade: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS User Community.




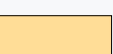
- Railway Station
- A Council Offices - Deane House
- B Somerset County Cricket Club
- C Brewhouse Theatre
- D Deller's Wharf
- E Firepool Weir
- F Pumphouse
- G St James' Church
- H St Mary's Church
- I Debenhams
- J Town Bridge



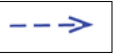
Existing

-  Watercourse
-  Buildings
-  Pedestrian/cycle bridge
-  Cycle route
-  Sustrans National Cycle Route
-  Public Right of Way
-  Flood Defences
-  Vehicle access
-  Public Space
-  Rear boundary to adjacent property
-  Town Centre Action Plan Policy Areas
-  Slipway






Proposed






Placemaking

-  Area of opportunity for destination
-  Proposed or improved public space

-  Proposed or improved play space
-  Development - Mixed uses - predominantly retail, with internal courts/gardens and roof terraces
-  Maximum storey height/focal point
-  Location for key active frontage
-  Location for enhanced frontage
-  Key views

Environment and Water (Green and Blue)

-  Character Area
-  Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space
-  Proposed or improved Green Spaces
-  Proposed Riverside Green Connections
-  Proposed Green Connections including SuDS (e.g. raingardens, swales) and trees

-  Proposed tree planting
-  Proposed SuDS
-  Desire line along river edge
-  Indicative angling location
-  Indicative water launch location

Community

-  Proposed Primary Active Travel Route
-  Proposed Secondary Active Travel Routes
-  Improved cycle connection
-  Improved pedestrian cycle connection
-  Potential for Mobility Hub
-  Improved road crossing point
-  Proposed meanwhile use (e.g. cultural, arts, creative industries, innovation hub, pop-up)
-  Proposed community use or small local business
-  Connection with existing theatre

9.5.2 Placemaking

Character

1. CA3 should have a locally distinctive identity reflecting the industrial heritage of the site (including previous mill, wharf, coal and timber yards and green space -nursery) and their key role in the positive relationship between the town centre uses/



Paddington Folding Bridge
Photo credit: SNappa2006

activity and the river. Proposals should demonstrate a commitment to the creation of an attractive, vibrant waterfront at every stage in the design process. Proposals should be distinctive - integrating contemporary, innovative architecture with the historic environment to reflect the identity of the River Corridor.

2. Introduce opportunities for higher profile placemaking features that celebrate the uniqueness of Taunton, such as innovative bridge design that doubles as public art.
3. Preserve views to St James' Church and St Mary's Church where possible in order to retain the local character.

Retail-led Development

1. Town Centre' should provide mixed-use development with a balance of residential, large format retail and office space, with large format retail integrated on the ground floor of mixed development blocks.
2. Flexible and adaptable design solutions are encouraged, to accommodate

change of use over time as necessary. A 'phase 0' should consider potential for the site to be used for meanwhile uses or 'pop-up' retail. This could include 'grid' building frame systems, with offsite construction methods and building elements that can change over time to accommodate different size units or uses. It may also include temporary and/or permanent floating commercial units.

3. Opportunities should be sought to provide a mix of uses that are complementary to the cricket ground and theatre, with potential for sport related or food and drink retail options.
4. Opportunities should be taken to understand the need locally for flexible workspaces, workshops and light production or craft industries which could be accommodated as part of the development and reflect the type of historic uses of the site.
5. Large urban blocks should be avoided, and a finer urban grain established, to increase permeability through sites and to the river.



CA1: Distinctive identity reflecting industrial heritage

Larger blocks with a more regular organisation should be located nearer the river and smaller blocks with less regularity would be suited to knit into existing development, with reflects the historic pattern of the site.

6. Street level façades should be activated with appropriate uses (such as retail, café etc) on ground floors to provide passive surveillance and create safe and welcoming spaces.
7. Active frontage should be provided along all waterfronts and key streets.
8. All building uses should be designed to allow for permeability through the blocks – with internal pedestrian routes, squares, courts and garden spaces – predominantly at ground floor level but also could be included over all levels to provided roof terraces and gardens that overlook the river.
9. The ground floor adjacent the main public space should be considered for a use such as a market or food hall.

Public Spaces

1. Allow for movement - Development proposals should establish clear routes through the space
2. Spaces should be easy to navigate – with a framework for movement provided by strong east west and north south routes, strong waterside edges with active frontage and elevational treatment, key public spaces along River Tone, strong active travel routes, key buildings at key corner to aid legibility.
3. New public spaces should be located at key points alongside the river and on the location of the previous nursery. These should be located on key routes and which are well overlooked, with adjacent retail or community uses.
4. Public spaces should connect to a network of green routes through the development, which should provide opportunities for interaction across all age groups with plenty of opportunities to meet with people in shared spaces. These green routes should be pedestrian friendly with traffic measures to aid driver awareness of pedestrians and street activities.
5. Provide for different activity - design nodes of activity should be complemented by ‘resting’ zones facing the space. Outdoor catering is encouraged around the edges of a space to animate the waterside public realm.
6. Public spaces and green spaces should provide new play space.
7. Design for all - the design of spaces should build in a degree of versatility so that they enable people to enjoy different activities in the same space and can be used for a variety of uses over time. Design should take account of different user group and should adequately integrate facilities for the elderly, disabled and children.
8. Spaces should be uncluttered, robust and safe. Specifications of materials and maintenance regimes must demonstrate high standards of visual quality, durability and environmental performance. Spaces should be laid out so that their functions are clear without the need for unnecessary signs or barriers.



PS9: Amphitheatre space

9. The main public space within the Morrisons site should be well connected with the existing bridge and create a wider connection with the Brewhouse theatre, incorporating an amphitheatre space with views across the river.
10. The area of public space north of Debenhams should better address the water, Town Bridge and Goodland Gardens, drawing attention to the important historic interface between Town and Water.
11. Open space design should seek opportunities to incorporate BNG through use of appropriate planting to compliment the public use function of the spaces (wildflower lawn, wetlands, trees) and incorporate infrastructure for protected species (bat and bird boxes, hibernacula).
12. Opportunities for green space should be maximised, and tarmacked areas should be minimised to strengthen the contribution of public spaces to reducing embodied carbon and improving biodiversity.

Building Heights

1. Building height, scale and massing should be appropriate to the location.
2. Well considered building heights and active frontage provide an opportunity to create a development that provides positive interaction in many ways – life where you chat with your neighbour in the street, relax in the terraced communal garden overlooking the river or grab a coffee in the local café.
3. Storey heights should reduce to the south adjacent to smaller dwellings.
4. Solar access should be ensured to the streams and river through reduced building heights, adequate front garden offsets and breaks in the built frontage.
5. Building heights should consider important views – for example to St John’s Church and St Mary’s Church.

Elevational treatment

1. Active façades – frontages should avoid blank walls, include frequent access points, windows and other

features which create and contribute to an active and welcoming feeling

2. Enhanced façades – provide a degree of passive surveillance and provide frequent areas of glazing.
3. Elevations along River Tone should be designed to provide variety and interest (rather than one monotonous elevation), with the possibility for differing setbacks to provide smaller scale meeting places along the river. This should be supported by a varied roofscape and roof terraces.
4. Any redevelopment of the Debenhams building, or new building should provide enhanced frontage overlooking the public space to the north-west and should emphasise Town Bridge as a key asset.

Parking

1. Low levels or zero parking are expected in this town centre location. Parking and service access should be located to be discrete; generally internal to development blocks or on street.



EL1: Active façades to create a welcoming feeling

Retained access

1. Access should be maintained to the rear of buildings along the north and west of the site, with an appropriate interface that does not become car dominated.
2. Access should be retained to the building at the east corner of the site by Priory Bridge Road.
3. Black Horse Lane must be retained with an appropriate interface to new building and should not be car dominated.
4. Access should be retained to the buildings behind Deller's Wharf.

Vehicle Access & Servicing

1. All vehicle access into and through the site must not dominate proposals and should be designed to be discrete, giving priority to active travel routes.
2. Routes and parking for delivery vehicles should be designed so to be discrete.

9.5.3 Environment and Water

A Council Offices - Deane House

B Somerset County Cricket Club

C Brewhouse Theatre

D Deller's Wharf

E Firepool Weir

F Pumphouse

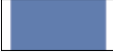

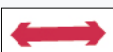

G St James' Church

H St Mary's Church

I Debenhams

J Town Bridge

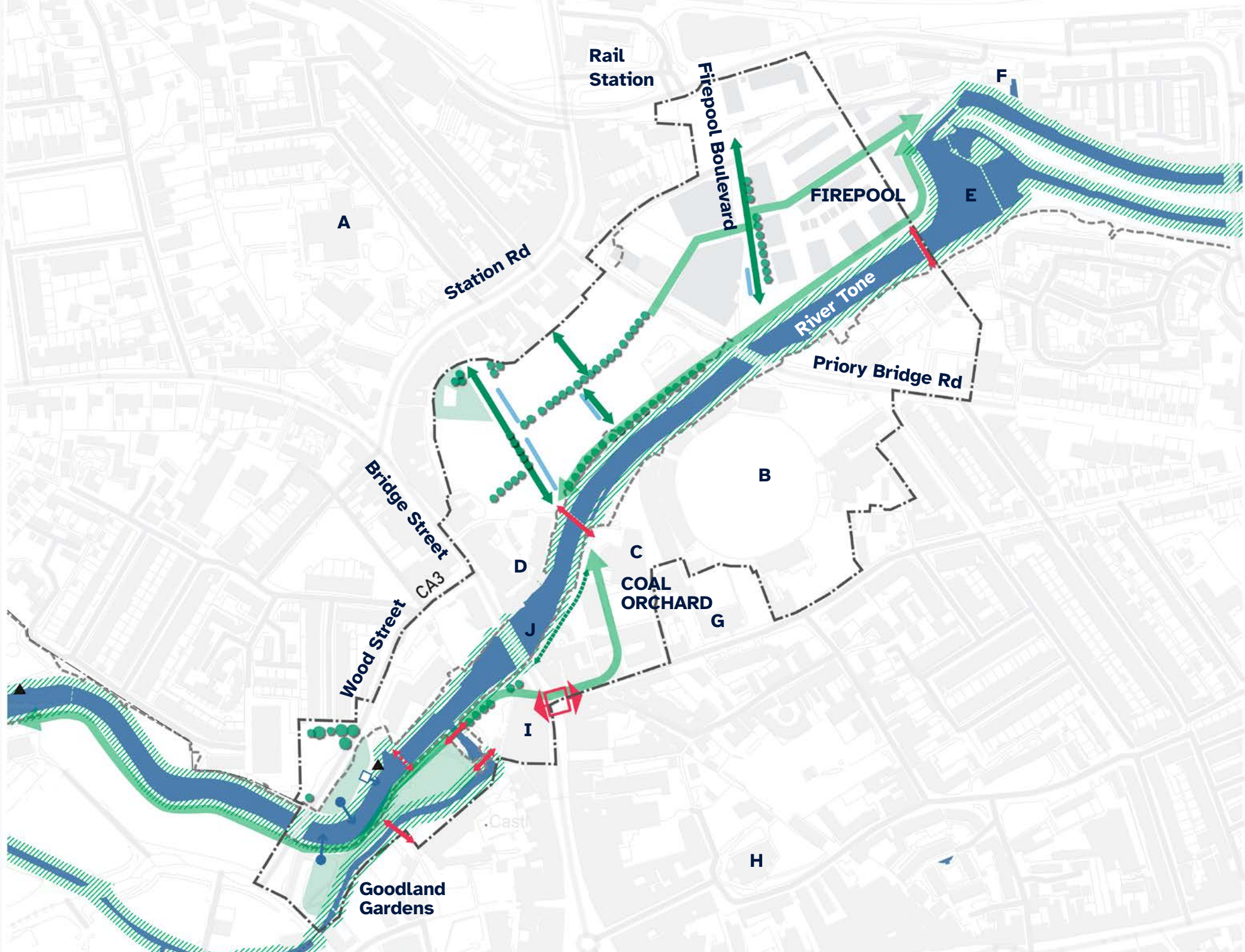
Existing

	Watercourse
	Buildings
	Pedestrian/cycle bridge
	Slipway

Proposed

Environment and Water (Green and Blue)

	Character Area
	Minimum 8m offset from watercourse; riparian zone - to create continuous public access to water's edge & provide wildlife habitat, tree planting & green space
	Proposed or improved Green Spaces
	Proposed Riverside Green Connections
	Proposed Green Connections including SuDS (e.g. raingardens, swales) and trees
	Proposed tree planting
	Proposed SuDS
	Desire line along river edge
	Indicative water launch location
	Indicative watersport facility location
	Indicative angling location



Water Corridors and Nature

1. 'Town Centre' should create a well maintained and enhanced River Tone corridor, with a continuous waterside wildlife and landscape corridor - providing a river edge treatment that encourages interaction with water and creates nature-based solutions that create active spaces, improve health and well-being and are positive for both the environment and economy. This should provide a minimum 8m riparian zone, to maintain access, create habitat for wildlife and provide green spaces and trees along the watercourse.
2. Service access should be maintained along the river and mill stream for the Environment Agency - to minimise hard surface adjacent to the river pedestrian routes would be acceptable to use for service access.
3. Connections to Firepool Lock, Weir and the Pumphouse should be maintained and improved alongside the River Tone.

4. Proposals will be assessed by Building with Nature and should meet Nature Core Standards, Well-being Standards, Water Standards and Wildlife Standards.
5. Achieve at least 10% Biodiversity Net Gain - refer to Somerset Council Biodiversity Net Gain Guidance Note (February 2024).

Connections to watercourses

1. 'Town Centre' should provide a minimum of two multi-functional green connections; that provide good permeability and clear links between new development areas to the River Tone. These should include SuDS - for example raingardens or swales and tree planting, as well as prioritise pedestrians, cyclists and wheeling.
2. Improvements should be made to the cricket club's relationship with the river through widening the footpath along the river and creating better visual connections

Tree planting

1. Opportunities should be taken along key routes to increase tree planting, including street trees, orchards and trees within green spaces. Trees should be in keeping with the local character and it should be ensured that the local environment is suitable for them.
2. Proposed trees including along the key east-west route connecting to Firepool, trees within green links and new trees in proposed green spaces.
3. Trees should be native (unless there are overriding reasons) and once established, should be allowed to mature with little or no impact from humans, i.e. should not be subject to pruning or management regimes unless in the interest of public safety. Trees should be planted in groups where possible with complimentary landscaping to maximise ecological value.
4. Tree pits should be sufficient and large enough to support tree growth.



WCN1: Enhanced River Tone corridor

5. Trees should be incorporated into plazas and areas with extensive hard surfaces.
6. Tree canopies should cover large areas.

SuDS

1. Ensure high-quality SuDS and water management with the creation of a multitude of green SuDS throughout to give opportunities for community spaces and/or water play.
2. Design for greener streets prioritising SuDS and permeable surfacing over tarmac / concrete and piped drainage.

Energy

1. Buildings should meet with the requirements of Somerset West and Taunton's Net Zero Carbon Toolkit in relation to energy efficiency, low carbon heating, renewable energy generation and embodied carbon.
2. The potential should be explored for site wide energy solutions, e.g. Hydropower powered by the weir and Water Source Heat Pumps.
3. Energy demand should be minimised, by careful building orientation optimised to balance solar gain and increase south facing roof area.
4. Proposals should engage with Taunton's early techno-economic feasibility work on the mapping of heat network opportunities (demands, heat sources, energy centre locations) at an early stage.
5. Opportunities should be taken for homes to include battery storage with onsite renewable generation, to maximise the benefit to the homeowner.


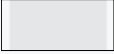
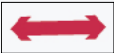

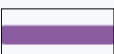


En3: Building orientation optimised for south facing roof area

9.5.4 Community

- A Council Offices - Deane House
- B Somerset County Cricket Club
- C Brewhouse Theatre
- D Deller's Wharf
- E Firepool Weir
- F Pumphouse
- G St James' Church
- H St Mary's Church
- I Debenhams
- J Town Bridge

Existing

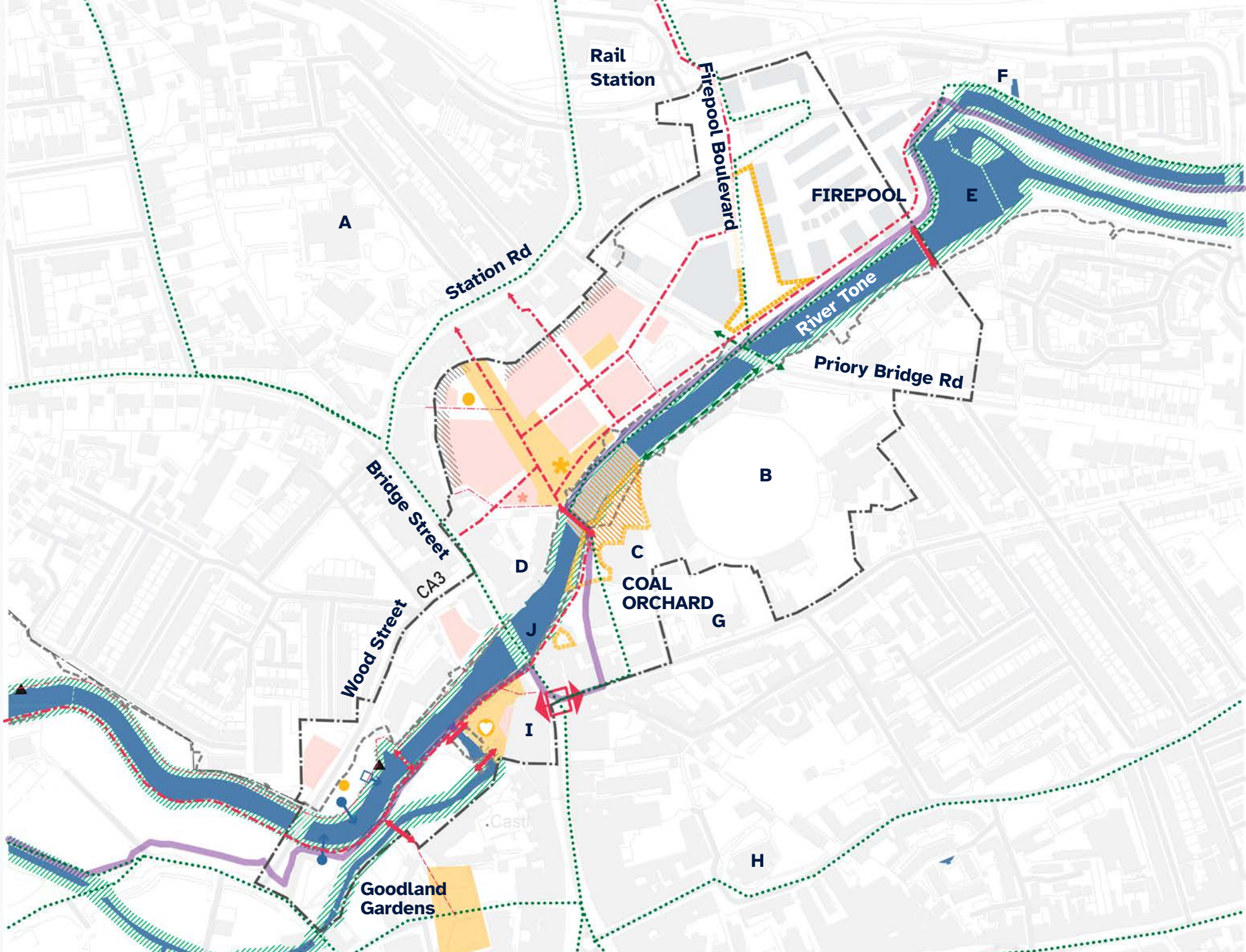
-  Watercourse
-  Buildings
-  Pedestrian/cycle bridge
-  Cycle route
-  Sustrans National Cycle Route
-  Public Right of Way

Proposed

Community

-  Proposed or improved public space
-  Proposed or improved play space
-  Development
-  Character Area
-  Proposed Primary Active Travel Route
-  Proposed Secondary Active Travel Route

-  Improved cycle connection
-  Improved pedestrian cycle connection
-  Indicative water launch location
-  Indicative watersport facility location
-  Indicative angling location
-  Proposed meanwhile use (e.g. cultural, arts, creative industries, innovation hub, pop-up)
-  Proposed community use or small local business



Enhancing Active Travel

1. Taking an 'Active Travel' first approach, in this town centre location which is walkable to most facilities and near bus station and bus stops. Pedestrians, cyclists and wheeling should be prioritised, with vehicle ownership dissuaded in an area with such good public transport links. Cycle storage should be generously provided, and car parking limited to schemes such as car share and electric pool cars. Positive connections are important to the Train Station and High Street.
2. A Primary Active Travel Route should run along the north bank of the River Tone providing good east-west connectivity to French Weir Park & Longrun Meadow to the west and onto Firepool and beyond to the east, as leisure/recreational 'book-ends' to the town centre.
3. Improvements should be made to the pedestrian, cycle and wheeling routes along the length of the river with improved access and widening in some parts to create an overlooked footpath and cycleway.
4. A strong Primary Active Travel Route should run through the centre of the site from Bridge Street to Firepool.
5. Two strong north-south Primary Active Travel Routes should connect from Station Road through to the River.
6. Secondary Active Travel routes should connect to Bridge Street and Station Road.
7. Existing cycle routes and the long distance Sustrans route 3 should be retained and reinforced.
8. Mobility hubs should be provided, potentially adjacent to Priory Bridge Road, Third Way Bridge and at Coal Orchard.
9. Improved connections should be created for pedestrians, cyclists and wheeling between Goodland Gardens and Coal Orchard, particularly at the road crossing next to Debenhams.
10. Design for cyclists - proposals should follow the guidance in Local Transport Note 1/20 - Cycle Infrastructure Design. Designs should follow guidance in the Public Realm design guide for Taunton Garden Town Supplementary Planning Guidance.

11. Refer to Taunton LCWIP and Connecting our Garden Communities plan

Supporting Activity

1. 'Town Centre' should provide locations for meanwhile uses e.g. cultural, arts, leisure and creative industries to support the growth of new businesses in Taunton.
2. Provide areas for community use and small local business to foster and encourage the development of a close-knit community.
3. Engagement should take place with local interested groups and businesses.
4. The design process should engage with the idea of creating a 'circular neighbourhood', promoting bottom-up design development.

5. Explore the viability of introducing café space and other active frontage into the ground floor of the Pumphouse, or between the Pumphouse and Firepool Lock, as part of a comprehensive conversion of the landmark building. The aim is to take the opportunity of conversion to create an eastern 'bookend' to the town centre, along with French Weir to the west.



SA1: Locations for meanwhile uses to support growth

9.5.5 Design Briefs

Debenhams (Goodland Gardens Policy G2)

Existing

Buildings: Retention of existing Debenhams building for re-use. Retention of existing buildings to north of Debenhams (short terrace).

Sustrans National Cycle Route 3: Retain existing cycle route with potential re-routing through public space.

Flood Defence: Retention or replacement of existing.

Placemaking

Improved public space: Potential to reconfigure public space to better connect the town centre to waterside heritage.

Development: Potential extension to Debenhams (west side).

Maximum storey height: Maximum 2 storey extension.

Location for key active frontage: Overlooking public space, the River Tone and Goodlands Gardens.

Views: Key corner of Debenhams to mark entrance to public space.

Environment and Water (Green & Blue)

Minimum 8m offset from watercourse; riparian zone – to maintain access, provide wildlife habitat, tree planting & green space: To be provided along the edge of public space.

Proposed Riverside Green Connections: Improved relationship to river from public space and continuous green connection towards Tangier and Firepool.

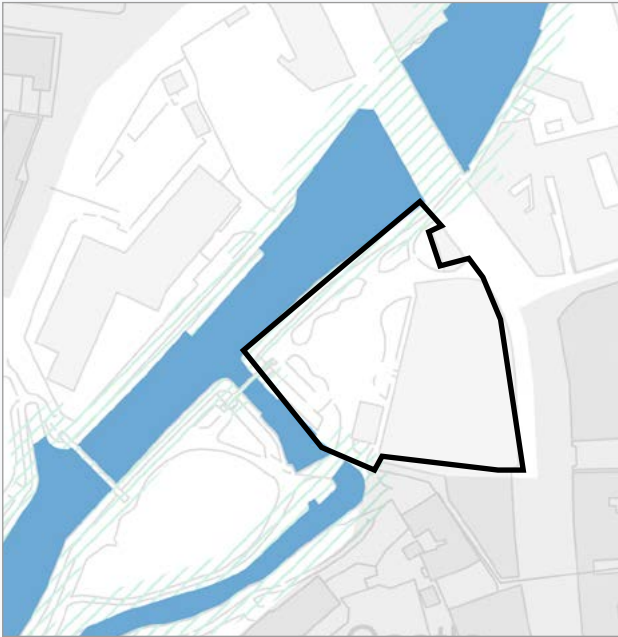
Proposed tree planting: Tree planting within public space.

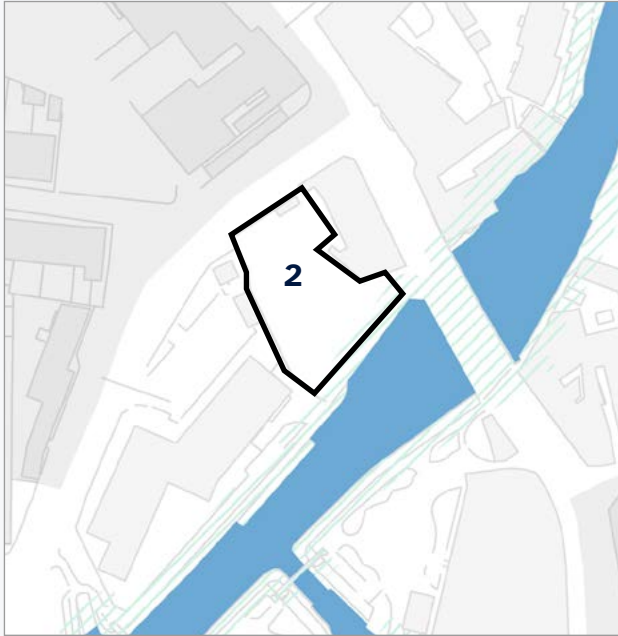
Improved Green Spaces: Improved interrelationship between public space and Goodland Gardens.

Community

Proposed cycle route: Improved crossing to St. James' Street for cyclists, pedestrians and wheeling towards Coal Orchard.

Proposed Active Travel Routes: Maintain connection alongside the river and make improvements where possible.





Wood Street (Wood Street Policy TG1 - Site 2)

Mix of uses, allocated for 20 residential units, retail and leisure

Existing

Road: Access from Wood Street.

Flood Defences: Retain

Placemaking

Development: Leisure led mixed use

Maximum storey height: 3-4 storeys

Location for key active frontage:
Towards River Tone and enhancement

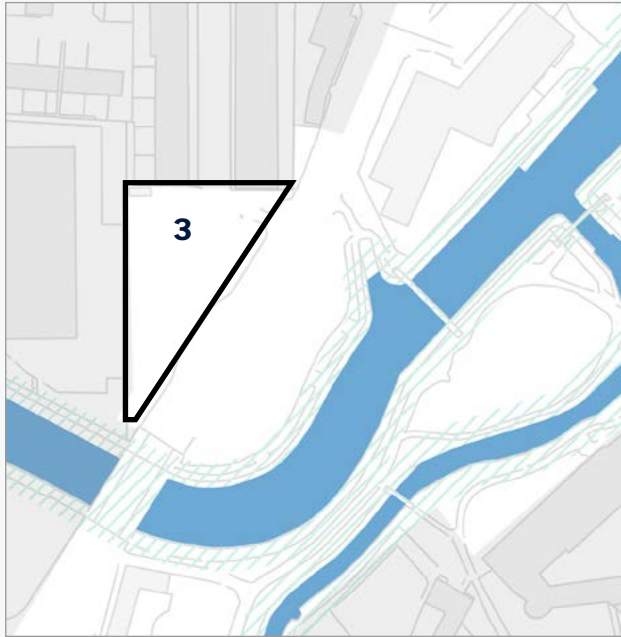
Environment and Water (Green & Blue)

Minimum 8m offset from watercourse; riparian zone - to maintain access, provide wildlife habitat, tree planting & green space: To be provided along edge of site.

Community

Proposed Active Travel Routes: Maintain secondary active travel connection alongside river and make improvements where possible including completing the missing public riverside path connection.





Wood Street (Wood Street Policy TG1 - Site 3)

Residential only, allocated for 20 residential units

Existing

Buildings: Buildings on Site 3 may be demolished.

Road: Access from Wood Street.

Flood Defences: Retain.

Placemaking

Development: Housing led mixed use, with potential for a mobility hub and an element of community use.

Maximum storey height: 4 storey

Location for key active frontage: Fronting Wood Street

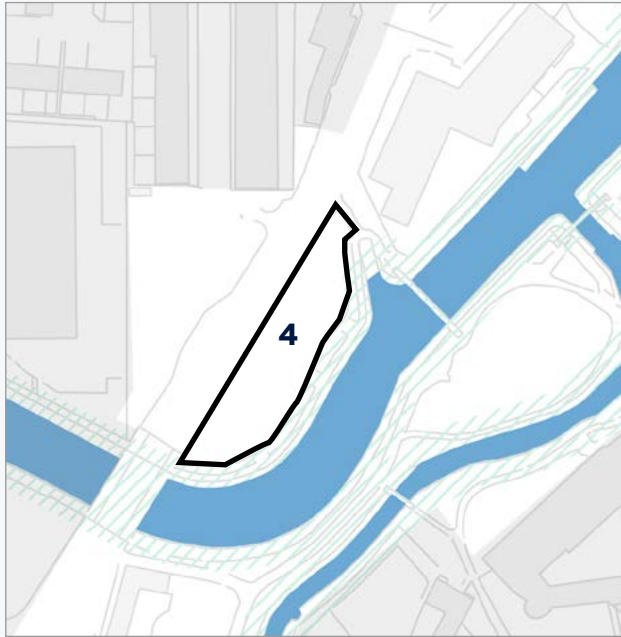
Environment and Water (Green & Blue)

Proposed Green Spaces: Potential to draw on the character of adjacent site with mature trees and green space.

Community

Use: Opportunity for community use on site.





Wood Street (Wood Street Policy TG1 - Site 4)

Allocated as landscaped open space and/or boating facilities

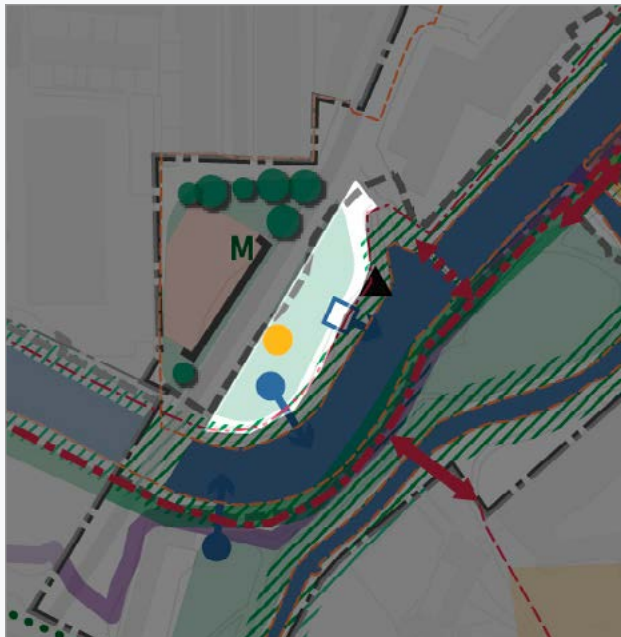
Existing

Road: Access from Wood Street.

Flood Defences: Retain

Placemaking

Proposed play space: Within existing green space.



Environment and Water (Green & Blue)

Minimum 8m offset from watercourse; riparian zone - to maintain access, provide wildlife habitat, tree planting & green space: To be provided alongside River.

Improved Green Spaces: Improvements to improve access to water.

Community

Proposed water launch location: Alongside river.

Proposed angling location: Alongside river.

10 Delivery

10.1 Governance

Constructive collaboration across multiple agencies, including but not limited to Flood and Coastal Erosion Risk Management (FCERM) authorities, is at the core of the Taunton Waterways Strategy. It has been central to the formation of the Strategy and should remain at its heart going forward so that decision-making that affects the Waterways Corridor continues to benefit from the valuable perspectives of a cross-section of informed stakeholders.

Specifically in relation to water management, the Taunton Waterways Management and Maintenance Plan (Appendix B page 20) identifies the need for a governance framework to be developed for the future maintenance of important water management assets. This is in response to shortcomings in current arrangements associate, with multiple bodies, a lack of clarity on responsibility, helpful but reactive maintenance and no guarantee that current maintenance will continue in perpetuity. Given the critical importance of well-planned and maintained

water management to Taunton's safety and success, a stronger governance framework would be beneficial.

Beyond effective water management, stronger and clearer governance is also required to ensure that the wider Outcomes from Investment are achieved over the long term, in alignment with the Taunton Garden Town Vision.

The establishment of robust governance to oversee implementation of the Taunton Waterways Strategy is therefore a Top Priority, with the purpose being "To maximise the positive placemaking, environmental and community outcomes that can be achieved from every investment made in water management and waterside development."

Governance by existing bodies

The terms of reference for the majority of FCERM authorities are tightly drawn around water management matters with specific responsibilities for each authority in isolation making them unsuitable for

governing the wide-ranging Waterways Strategy.

There are also established **partnerships**, notably FWAG's Somerset Catchment Partnership (SCP) and the Somerset Rivers Authority (SRA), that do have a wider remit and a commitment to collaborative working, making them better suited to take on the Taunton Waterways governance role. However, their terms of reference are also primarily focused on water management (catchment scale improvement to Somerset's water environments in the case of the SCP and supporting implementation of the 20 Year Flood Action Plan for the SRA) and, whilst these are both inter-related with the Waterways Strategy, it would not be appropriate to propose a revision to their terms to oversee implementation of the much more expansive Waterways agenda.

If it **were** possible to add the Taunton Waterways governance role to another existing group with an established and focused agenda, there is a significant risk that it would become a single item on what are already likely to be full agendas.

It may be perceived to be peripheral to core business and, therefore, is likely to be one of the first items to be dropped if time runs out.

The exception would be the Taunton Garden Town Advisory Board whose core functions include leading the Garden Town project and its delivery, of which the Taunton Waterways Strategy and Guidance is a fundamental component. The Strategy therefore conforms to current terms of reference.

Preparation of the Strategy has been overseen by the Taunton Garden Town team who report to the existing Advisory Board, and there are clear benefits of continuity as the Strategy moves from formulation to implementation.

The alternative is to establish a bespoke Steering Group.

A new Taunton Waterways Steering Group

The Somerset Water Management Partnership is an interesting model that could inform a new Taunton Waterways Steering Group. The Partnership's website states that it provides "...a forum for consultation and to debate issues around water management..." in the catchment areas of the Parrett, Brue, Axe and their tributaries. Their vision statement is for "A sustainable approach to water and land use management that, wherever possible:

- benefits the social, economic and cultural life of the catchments
- conserves and enhances the natural environment"

The forum is "...an opportunity for a group of stakeholders to meet to consider water matters of significance affecting, or with the potential to affect, the communities, landscape, economy and ecology."

The breadth of relevant issues is similar to those of the Taunton Waterways Strategy

and it would be possible to establish a comparable partnership for the River Tone, but with aims and objectives that go beyond discussion and are specifically more advisory and strategic, to enable it to operate as an effective Steering Group and to assist responsible bodies with considered decision-making that is couched in the approved Strategy.

The aims and objectives for a bespoke Taunton Waterways Strategy Steering Group would need to be agreed with partners but may include:

- To work in partnership to promote an outcomes-led approach to all investment in Taunton's Waterways Corridor, in line with the Taunton Waterways Strategy and Guidance.
- To work together to inform integrated and sustainable responses to the issues and opportunities addressed in the Strategy.
- To work collectively to advise on and steer emerging strategies, projects and proposals.

- To increase awareness and understanding of water-related issues and opportunities within partner organisations and the Taunton community.
- To lend weight to funding applications and strategic promotion.

The Steering Group composition would broadly reflect the make-up of the Stakeholder Team that has informed the drafting of the Strategy and Guidance, with representatives of each responsible group as outlined below:

1. Chair - Taunton Garden Town Team (Somerset Council)
2. Deputy - Planning Team
3. Lead Local Flood Authority (Somerset Council)
4. Environment Agency
5. Somerset Wildlife Trust
6. Wessex Water
7. Canal and River Trust
8. Highways and Active Travel (Somerset Council)
9. Climate Change (Somerset Council)

10. Taunton Town Council
11. A representative community organisation, such as Taunton River Watershed Alliance.

There would be a cost involved in formally establishing a Steering Group from scratch. Potential funding sources may include Ofwat Innovation Fund and UK Shared Prosperity Fund (UKSPF). There are likely to be further challenges in terms of the ability of the Council to resource and administer an additional governance body.

10.2 The need for a fresh approach to funding water management

Under the Flood and Water Management Act 2010, Local Authorities were given significant new responsibility for delivering local flood risk management. The Act effectively gave Somerset Council a leadership role as the Lead Local Flood Authority (LLFA).

LLFAs are required to:

- Develop, maintain and apply a local flood risk strategy
- Investigate all flooding incidents, where deemed to be necessary
- Maintain a register of assets relevant to flooding
- Adopt and maintain SuDS and approve drainage systems for construction work, in their capacity as SuDS Approving Bodies (SABs); and
- Co-operate with other Flood and Coastal Erosion Risk Management (FCERM) authorities, for example through building partnerships and ensuring effective multi-agency working.

In an era of budgetary constraints for Local Authorities, it can be a significant challenge for an LLFA to compete with other funding priorities for both capital and resource to deliver their statutory duty under the Act.

It is difficult to plan long term with a year-on-year funding approach for Local Authorities when trying to align with other longer-term programmes to which other FCERM organisations are committed.

Similarly, other Risk Management Authorities (RMAs) are able to secure funding to deliver operational requirements but have traditionally, and understandably, focused on securing funds that will deliver the minimum functional scheme necessary to deliver the operational benefit.

In recent years, the need to address climate change, help nature recovery and achieve healthier living have become established in political agendas and so there is greater recognition of the value of delivering such benefits through public funded schemes, including for flood risk management. However, the level of collaboration across RMAs remains limited and so opportunities for efficient cross-funding may be missed.

Therefore, a more innovative and expansive approach is needed to fund local water management, identifying the wider range of positive outcomes that can be achieved from investment in waterways and seeking funding that encompasses the delivery of those wider benefits. Casting the 'outcomes net' wider increases opportunities for funding that, historically, have not been considered. That approach is central to the Taunton Waterways Strategy.

It means that water management schemes themselves may need to be designed differently, and the planning and development process associated with those schemes will need to be more collaborative and inclusive, so that they are effective at achieving the wider benefits in addition to their primary functional purpose.

10.3 Potential Funding Sources

Sourcing funding and investment is key to the ability to deliver the frameworks and projects identified within this Strategy. Potential funding sources, reflecting the breadth of positive Outcomes from Investment are summarised in List 10.1 in the following pages.

List 10.1 Taunton Waterways Funding Sources

Flood Risk Management/ Waterbodies

Flood and Coastal Erosion Risk Management Grant-in-Aid Funding from Environment Agency

Summary: For flood and coastal erosion projects (FCERM) proposed by Risk Management Authorities (RMAs). Includes scope to fund development of strategies for reducing flood risks.

Applicability: Specific to flood and coastal erosion projects, as reflected by eligibility criteria. Extra funding is available if environmental benefits can be demonstrated. In addition to specific physical projects, funding is available ‘to develop a strategy to reduce flood or coastal erosion risks across several connected areas’ which could fund.

Somerset River Authority

Summary: The SRA oversees the Somerset Levels and Moors Flood Action Plan, and funds works that meet Flood Action Plan objectives.

Applicability: Important funding source because the eligibility criteria closely reflect the breadth of the Taunton Waterways Strategy’s stated Outcomes from Investment.

Westcountry Rivers Trust

Summary: Not a funding source as such, but a partner with valuable resource for delivering positive change. Focused on ‘bringing rivers to life in the Westcountry to achieve our vision and benefit nature, people and local economies’.

Applicability: WRT does not have funding but is resourced to support others in delivering education, citizen science and training programmes. Its aims are closely aligned with those of the Taunton Waterways Strategy

FWAG South West Somerset Catchment Partnership (SCP)

Summary: FWAG SW provides independent advice, combining an

understanding of farming systems, land management and farm businesses with habitat creation, habitat management and species conservation to effect positive environmental change in the wider landscape.

Applicability: Of particular relevance to the wider Catchment Framework

Canal and River Trust

Summary: Itself funded by People’s Postcode Lottery through the Postcode Earth Trust, CRT spends over £150m each year maintaining and improving the river and canal network nationally.

Applicability: CRT’s priorities are broadly aligned with those of the Taunton Waterways Strategy.

Environment Agency Fisheries Improvement Fund

Summary: Reinvests fishing licence income back into projects that provide positive outcomes for anglers.

Examples of projects that could receive FIP funding include projects that create fish passages, sustainable habitats, urban fisheries and improve local angling club fisheries.

Applicability: Specific to fishing infrastructure and access

Wessex Regional Flood and Coastal Committee (RFCC) Local Levy

Summary: The local levy is an additional, locally raised, source of income for flood and coastal erosion risk management projects to supplement national funding. Wessex RFCC raises a local levy on County Councils and Unitary Authorities within its boundary. The local levy is used to secure national funding (as part of the partnership funding mechanism) to invest in projects that are designed to reduce flood and coastal erosion risk for local communities.

Applicability: Focused on flood risk management operations so a potential funder for locally important flood risk management projects that are not funded nationally by Grant in Aid. However, the RFCC is committed to achieving the broader ambitions of the National Flood and Coastal Erosion Risk Management Strategy which include achieving sustainable growth and regeneration, economic development, enhancing the environment and embracing nature-based solutions and so it may be a potential funder of strategic frameworks aimed at unlocking sustainable development.

Environmental Improvements

Wessex Water Environment Fund

Summary: Part of the Wessex Water Foundation, the Environment Fund supports charitable and community activities that improve local biodiversity or have a positive impact on the environment for local people.

Applicability: Scope for funding initiatives that arise from the Community Framework

Natural England Species Recovery Programme

Summary: Natural England has been delivering its flagship Species Recovery Programme (SRP) for over 30 years, focusing on bespoke conservation action to reverse the fortunes of our most threatened native species. The Programme covers capital research and development, and capital interventions. A Capital Grant Scheme (CGS) has been introduced for 2023/24 and 2024/25 to complement the Species Recovery Programme.

Applicability: Specifically targeted at species recovery. Note, the initial application window has closed, but there may be further windows.

Nature Recovery Network - Countryside Stewardship

Summary: For farmers and landowners - pays for targeted actions relating to specific locations, features and habitats to contribute to environment and climate goals.

Applicability: To be replaced by NCF

Nature Recovery Network: Local Nature Recovery

Summary: Local Nature Recovery is the improved and more ambitious successor to the Countryside Stewardship scheme in England. It will pay for locally-targeted actions to make space for nature in the farmed landscape and the wider countryside, alongside food production. Through LNR the government wants farmers and landowners to be able to enter into private arrangements such as carbon trading, providing biodiversity net gain and nutrient trading.

Applicability: LNR may help fund strategic initiatives involving arrangements for carbon trading, providing biodiversity net gain and nutrient trading which could unlock strategic growth in Taunton. Scope for funding interest in the Catchment Framework.

Nature Recovery Network: Sustainable Farming Incentive

Summary: Pays farmers to adopt and maintain sustainable farming practices that can protect and enhance the natural environment alongside food production.

Applicability: Scope for funding interest in the Catchment Framework

Nature Recovery Network - Landscape Recovery

Summary: Landscape Recovery will pay for bespoke, longer-term, larger scale projects to enhance the natural environment. Intended for farmers and landowners.

Applicability: Whilst intended for farmers and landowners, it worth exploring the potential for Landscape Recovery funding to support preparation of the Linear Water Park Concept or Biodiversity Framework for example.

Natural England's Nutrient Mitigation Scheme

Summary: Government is developing a package of support to ensure that developers and local planning authorities can achieve nutrient neutrality as quickly as possible. Nutrient Mitigation Schemes can be set up with support from DEFRA and DLUHC, recouped from the sale of 'nutrient credits' to housebuilders.

Applicability: Scope to fund nutrient mitigation proposals that are capable of unlocking strategic growth in Taunton

Future Parks Accelerator

Summary: FPA is a collaboration with National Lottery Heritage Fund, the National Trust and the DLUHC aimed at supporting local authorities to improve quality, sustainability, connectivity and access to urban green space.

Applicability: FPA does not have funding but is resourced to support others to make parks and green spaces more sustainable.

It includes advice on habitat banks. Its aims are closely aligned with those of the Taunton Waterways Strategy

Tree Planting/Woodland Creation

Forestry England Woodland Partnership

Summary: A leasehold scheme creating new woodlands across England in partnership with private and public landowners by offering a commercial rent to landowners. Woodland designed, created and managed by Forestry England.

Applicability: Appropriate for large scale woodland creation in the wider catchment, which could deliver considerable benefit in terms of natural water management

England Woodland Creation Offer (EWCO)

Summary: Landowners, land managers and public bodies can apply to the England Woodland Creation Offer (EWCO) for support to create new woodland, including

through natural colonisation, on areas as small as one hectare.

Applicability: Appropriate for smaller scale woodland creation in the wider catchment, with additional payments for societal benefits which would include water management

Local Authority Treescapes Fund (LATF)

Summary: The LATF is part of the Government's Nature for Climate Fund and is for local authorities to restore tree cover in non-woodland areas which may have been impacted by issues such as disease, habitat degradation or ageing tree stock. The fund aims to improve landscape connectivity and provide benefits to ecosystems and society, such as carbon absorption, flood protection and support for biodiversity.

Applicability: Very relevant but time limited. The fund is focused on planting and natural colonisation of trees in areas outside of woodlands, including parklands, riparian zones, urban areas, beside roads

and footpaths. It aims to provide benefits including flood protection.

Urban Tree Challenge Fund (UTCF)

Summary: The fund provides 80% of the costs for planting and establishing trees in urban and peri-urban areas.

Applicability: No specific reference to funding being related to the wider benefits of tree planting.

Somerset Trees for Water Programme

Summary: To provide targeted tree planting in locations which will improve water management and reduce – or slow the flow of – water across the main watercourses of Somerset. Funded by the Somerset Rivers Authority (SRA) and led by Reimagining the Levels (RtL) in partnership with FWAG SW and the Woodland Trust

Applicability: Relevant to water management in the wider catchment.

Woodland Trust MOREwoods

Summary: MOREwoods funding is available for any landowners or farmers to plant a woodland on their land.

Applicability: Appropriate for smaller scale woodland creation in the wider catchment. No specific reference to funding being related to the wider benefits of tree planting

Woodland Trust MOREhedges

Summary: MOREwoods funding is available for any landowners or farmers to plant hedges on their land. The MOREhedges scheme can cover up to 75% of the cost of planting 100 metres or more of new hedging and allow a large tree to grow every six metres.

Applicability: No specific reference to funding being related to the wider benefits of tree planting.

Development and Regeneration

Individual Investment Propositions

Summary: Investment in a business venture, from small scale start-up through to proposals to re-purpose assets such as the Pumphouse or Debenhams building.

Applicability: There are numerous opportunities within the Strategy for income generating investments.

UK Shared Prosperity Fund (UKSPF)

Summary: The primary goal of the UKSPF is to build pride in place and increase life chances across the UK. All places across the UK will receive a conditional allocation from the UKSPF including Somerset.

Applicability: If not already secured and allocated, the SPF provides an opportunity to invest in delivering the Strategic Goals for Taunton Waterways via the Priority Investments

Brownfield, Infrastructure and Land Fund

Summary: The fund's purpose is to unlock strategic housing sites including housing-led, mixed-use opportunities where brownfield, infrastructure or land projects face delivery and/or viability challenges.

Applicability: Redevelopment sites in Taunton tend to face viability and therefore deliverability challenges owing to a combination of relatively low property values and high costs associated with site remediation requirements. The ability to maximise developable area is constrained by the need to deliver BNG, strategic flood risk mitigation and public open space, and there are additional challenges related to nutrient management. The Taunton Waterways Strategy provides a whole town approach to addressing these challenges, by coordinating a strategic response to off-site delivery of green space, healthy living, BNG and nutrient management, AND achieving enhanced property values over time.

Funding requires projects to be in contract by 31st March 2026, thereby limiting eligibility.

Delivery of development sites

Summary: Planning consents.

Applicability: Determination of planning application for redevelopment needs to consider the Taunton Waterways Strategy and strive for the best outcomes to be delivered from each proposed development

Developer Contributions: Section106 Agreements

Summary: Section 106 agreements are used to make a development proposal acceptable in planning terms, that would not otherwise be acceptable, and are focused on the mitigation of site specific impacts.

Applicability: S106 requirements need to be related to the development. The major redevelopment sites lie within the Waterways Corridor so, subject to viability, some investment can be expected.

Developer Contributions: Community Infrastructure Levy (CIL)

Summary: The CIL is a standard charge to help pay for the provision, improvement, replacement, operation and maintenance of infrastructure. CIL applies to new floor space and charges are based on the size, type and location of the new development.

Applicability: Scope to deliver some potential Waterways investments provided they are compatible with CIL spending criteria.

Biodiversity Net Gain (BNG)

Summary: The proposed development of the allocated sites will need to demonstrate how a minimum of 10% BNG will be achieved. Achieving this on site is generally the preferred approach but, given viability challenges, the Linear Water Park concept offers an opportunity for coordinated and local BNG delivery, funded by the developers.

Applicability: The Biodiversity Framework for the Waterways will provide the strategic framework for implementing off-site but local BNG, in a coordinated manner that delivers maximum positive outcomes from investment, local to the development sites.

Sport and Arts

Sport England Small Grants Programme
Summary: The Small Grants Programme seeks to develop opportunities for communities to get more people physically active.

Applicability: Some of the Outcomes from Investment focus on helping to people to have more active and healthier lives, and the Strategic Frameworks will identify specific projects in more detail. It is anticipated that some of these will be eligible for Sport England funding.

Sport England: Active Together

Summary: A £7.5 million fund as part of a support package to help clubs and organisations set up and run crowdfunding campaigns related to the ongoing impact of Covid-19, as well as the emerging energy, cost of living or other local crises - such as adverse weather.

Applicability: Potential support to Taunton's waterside recreation clubs that are marginal and at risk.

Arts Council England Cultural Development Fund (CDF)

Summary: The aim of the fund is to level up through investment in culture. The fund will unlock local growth and productivity, increase access to creativity and culture, and regenerate communities. It will achieve this through capital investment in transformative place-based creative and cultural initiatives.

Applicability: The deadline has passed. In the event of another round, the

Community and Cultural aspects of the Waterways Strategy would appear to be eligible for funding.

Air Quality and Climate Change

DEFRA Air Quality Grant Scheme

Summary: The scheme provides funding to eligible local authorities to help improve air quality.

Applicability: Current round concluded in 2023.

National Lottery UK Portfolio: Climate Action Fund

Summary: The Climate Action Fund is supporting communities across the UK to take action on climate change. The fund aims to involve more people in climate action and the organisation wants to inspire bold and exciting change

Applicability: An application could build on Taunton's need to manage flood risk (that results from climate change) in a

way that delivers a wide range of positive outcomes for the community. Funding would need to be sought for a specific project or initiative, such as , for examples, investment in delivering the actions that emerge from the Tributaries Framework.

Local Climate Bonds (LCB)

Summary: LCBs have the potential to raise millions of pounds for green projects in the UK. They are regulated investment products launched by Councils to access cost-effective funding for specific decarbonisation projects, offering local people an opportunity to invest in their area in a way similar to crowdfunding and to make a return from doing so.

Applicability: Somerset Council is not yet a 'Committed Council'. Could be applied to specific decarbonisation projects, such as hydro power generation or the cooling of plant by water.

Active Travel England

Summary: DfT's funding for high-quality walking and cycling routes.

Applicability: Active Travel Fund 4 Extension has been concluded

Community

The Community Ownership Fund: Round 4

Summary: Funding for community organisations to take ownership of local community assets at risk of loss, and to support community groups where the asset is already in community ownership but needs essential renovations to be sustainable for the long-term benefit of the community.

Applicability: No suitable assets have been identified in the Strategy to date.

Wessex Water Community Fund

Summary: This fund is part of the Wessex Water Foundation and aims to support community-based activities or projects that meet a local need and seek to improve the lives of local people who are in most need of support. These activities or projects should be informed by the people or community it seeks to serve and have considerable reach.

Applicability: May be appropriate for projects and initiatives identified through the Strategic Frameworks. The preparation of a part of the Community Framework itself may be eligible.

Crowd Funding

Summary: Crowdfunding is a way of raising finance by asking a large number of people each for a small amount of money.

Applicability: May be appropriate for projects that emerge from the Strategy.

National Lottery Community Fund

Summary: Awards money raised by National Lottery players to fund great ideas that help communities to thrive.

Applicability: Scope for funding of the Community Framework or Tributaries Framework, and/or projects that emerge from them.

Sponsorship

Summary: Scope for local business sponsorship of local assets.

Applicability: May be appropriate for smaller projects and initiatives, including the Quick Wins.

Appendix A

Glossary



A

Active travel

Active travel refers to modes of travel that involve a level of activity. The term is often used interchangeably with walking and cycling, but active travel can also include trips made by wheelchair, mobility scooters, adapted cycles, e-cycles, scooters, as well as cycle sharing schemes.

Agricultural runoff

The portion of rainfall that runs over agricultural land and then into streams as surface water rather than being absorbed into ground water or evaporating.

APP

Town centre Action Plan Policies

APIS

Adaptation Pathways in Somerset

Attenuation

In this document refers to the ability to temporarily store water for a period of time, to then release slowly back into the natural drainage system or watercourse.

B

Baseline

A fixed point of reference that is used for comparison purposes.

Bedforms

The form of the riverbed that develops as the result of bed material being transported and deposited. Examples include ripples and dunes on the bed of a river. Palaeo-Bedforms are often preserved in sedimentary rocks.

Biodiversity

The variety of living species on Earth, including plants, animals, bacteria, and fungi.

Blue infrastructure

Relates to urban water infrastructure, including ponds, lakes, streams rivers and storm water provision.

BNG

Biodiversity Net Gain

Breach

A breach of a flood embankment or natural riverbank occurs when water flows over or through the existing edge of the channel. This can be an intentional breach or unintentionally due to a flood event.

Brownfield

Urban sites for potential building development that have had previous development on them.

Bridleway

A type of Public Right of Way where the public have a right of access on foot, horseback or bicycle.

C

Catchment

A geographic area of land from which all surface water from rain, melting snow or ice flows into a particular as a river, stream, or lake. This area is defined by the topography of the land, with higher elevations forming the boundaries that direct the flow of water towards a common waterbody.

Channel realignment

The realignment of the river channel to redirect water flow.

CNCR

Climate Resilience Action Plan

Combined sewer overflow

Combined sewer overflows (CSOs) are overflow valves that reduce the risk of sewage backing up during heavy during storms and heavy rainfall. Combined sewers transport wastewater and stormwater to treatment plants, but intense or prolonged rainfall can overload them. CSOs divert excess flow direct to the rivers, enabling wastewater recycling plants to continue to operate and preventing upstream flooding of properties.

COWs

Critical Ordinary Watercourses

CrOW

Countryside and Rights of Way

CRT

Canal and Rivers Trust

CSO

Combined Sewer Overflow

Culvert(ed)

An enclosed artificial channel or pipe that is used to carry a watercourse beneath a road, building or structure.

D**Decarbonisation**

Removal or reduction of carbon dioxide (CO₂) output into the atmosphere.

DEFRA

Department for Environment, Food & Rural Affairs

Dewatering

The removal of water from a location.

Downstream

In the direction in which a stream or river flows.

Dredging

The excavation of unwanted sediment material from a water environment.

Dynamic equilibrium

Rivers are constantly changing over time to reach a balance with the processes that determine their form. As the flows of energy and materials passing through the river change over time, so too does the river towards this equilibrium.

E**EA**

Environment Agency

Easy access trail

Easy access trail design principles give everyone the opportunity to use a countryside path route. They have easy terrain and no physical barriers, like stiles, making them suitable for pushchairs, wheelchairs and other mobility aids.

Ecosystem

A geographic area where plants, animals, and other organisms, as well as weather and landscape, work together to form a bubble of life.

EIA

Environmental Impact Assessment

ELMs

Environmental Land Management

Embankments

A bank of earth or stone that is used to hold back water to reduce the risk of flooding to an area of lower lying land. These can be used along waterways and the coastline.

ENCA

Enabling a Natural Capital Approach

Erosion

The physical break-up and transportation of materials from one place to another through natural processes. In river systems lateral erosion erodes the banks of the river (typically on the outside of a bend in the river), whilst simultaneously depositing sediment on the inside of the bend, thus changing its route without significantly changing its width. Where lateral movement is not possible through constraints of urbanisation, channels become over widened, deep and straight.

Vertical erosion involves the wearing away and deepening of the riverbed.

Eutrophication

Excessive richness of nutrients in a lake or other body of water, frequently due to run-off from the land, which causes a dense growth of plant life.

F**FCERM**

Flood and Coastal Erosion Risk Management

Flood alleviation

The detention and/or diversion of water during flood events for the purpose of reducing discharge or downstream flooding.

Flood risk activity

Used in this document in relation to the Environment Agency terminology meaning any activity within 8 metres of any flood defence structure or culvert on a main river, or 16 metres on a tidal river. If such an activity is not covered by a Flood Risk Activity Exemption registration it will require a permit, issued by the Environment Agency.

Flood risk activity exemption

Some flood risk activities are exempt from needing a permit and you can carry out the work if you register an exemption. Exemptions are registered with the Environment Agency.

Floodplain

An area of low-lying ground adjacent to a river, formed mainly of river deposits and subject to flooding.

Flood mitigation

Action(s) taken to reduce or eliminate long-term risk to life and property from a flood event.

Flood resilience

Minimising damage during times of flooding to enable quicker recovery after a flood event has occurred.

Fluvial flooding

Fluvial flooding occurs when rivers and streams overtop their banks and water flows out onto the adjacent low-lying areas (the natural floodplains).

Footpath

A path for people to walk along, and a commonly used term that may or may not refer to a path with legal Public Right of Way status.

FRMA

Flood Risk Management Authority

FWAG

Farming and Wildlife Advisory Group

G**Geomorphology**

The shape of landforms and physical features.

GI

Green Infrastructure

Green infrastructure

A strategically planned network of natural and semi-natural areas with other environmental features, designed and managed to deliver a wide range of ecosystem services, while also enhancing biodiversity.

H**Hydropower**

The use of falling or fast-running water to produce electricity or to power machines.

I**IDB**

Internal Drainage Board

Infiltration

Infiltration is the process by which water on the ground surface enters the soil.

Irrigation

The practice of supplying land with water so that crops and plants will grow

L**Left and Right banks**

When facing downstream the left bank of a river is on the left side and the right bank is on the right side.

LLFA

Lead Local Flood Authority

LNP

Local Nature Partnership

LPA

Local Planning Authority

M**Main River**

Usually larger rivers and streams, designated as such, and shown on the Main River Map, falling under the jurisdiction of the Environment Agency. The Environment Agency has powers to carry out maintenance, improvements or construction work on main rivers to manage flood risk. Other rivers and streams are called 'Ordinary Watercourses'.

MMP

Management and Maintenance Plan

Mobility hub

A mobility hub is a recognisable place with an offer of different and connected transport modes supplemented with enhanced facilities and information features to both attract and benefit the traveller.

Morphology

The shapes of river channels and how they change in shape and direction over time.

Multi-Use Routes

Multi-use routes, trails or networks are about the ability to be used by a range of active travel modes, for instance walking, as well as cycling and horseback. Routes might link up a network of existing Public Rights of Way or might integrate with paths without Public Right of Way status.

N**Nature Recovery**

Improving the landscape's resilience to climate change, providing natural solutions to reduce carbon and manage flood risk, and sustaining vital ecosystems such as improved soil, clean water and clean air.

NCN

National Cycle Network

NCR

National Cycle Routes

NFM

Natural Flood Management

Non-main River

All watercourses that are not under the power of the Environment Agency.

NRS

Network Recovery Strategy

Nutrient neutrality

Nutrient neutrality is the outcome achieved when a particular land use or a specific development, within catchment areas of vulnerable watercourses, does not result in an increase in phosphate and nitrate levels in those watercourses beyond current levels.

O**Ordinary watercourse**

A watercourse that is not part of a main river and includes rivers, streams, ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.

These are under the permissive powers of the Lead Local Flood Authority.

P**Permissive powers**

It remains the decision of the authority as to whether it carries out enforcement action or not. Permissive powers ensure that appropriate maintenance is carried out by riparian landowners on rivers and ordinary watercourses. These powers can be exercised if it is deemed that a lack of maintenance or an alteration to a watercourse pose a flood risk. Exercising of permissive enforcement powers will only take place when necessary and as a last resort when all other opportunities to resolve the issue have been explored.

PRoW

Public Right of Way

Public Rights of Way

A route over land which the public has a legal right to use at any time. Local councils have a responsibility to maintain and protect public rights of ways.

Public Byway

A type of Public Right of Way where the public have a right of way on foot, horseback, bicycle or vehicle. This includes horse-drawn carriage, motorcycle or other motor vehicle.

Public Footpath

A type of Public Right of Way where the public have a right of way on foot only. Prams, pushchairs, wheelchairs and invalid carriages are allowed along public footpaths. However not all paths may be suitable for the various types of access, particularly in the countryside.

R**Realigned**

Change to the existing route to a different position.

Restricted Byway

A type of Public Right of Way where the public have a right of way on foot, horseback, bicycle or horse-drawn carriage.

Rhyne

A running waterway that links a ditch or stream to a river. A rhyne is more specifically used to turn areas of wetland close to sea level into useful pasture or agricultural land. Water levels are carefully controlled to allow the land to become wetter at times of the year when this will improve grass growth. Rhyne systems are managed and operated by the Somerset Drainage Board Consortium.

Riffles

An area of stream characterized by shallow depths with fast, turbulent water over rocks.

Riparian

Relating to or situated on the banks of a river.

River Channel

The main route, usually incised into the landscape, in which a body of water flows downstream. The channel shape and cross section changes along the course of a river varying in width and depth of the channel. Typically, the channel gets wider and increases in capacity in a downstream direction.

Riverbank

The land alongside the edge of a river.

RMAs

Risk Management Authorities

S**S106**

Section 106

SAB

Sustainable Drainage System Approval Board

Sequestered carbon

The capturing, removal and storage of carbon dioxide (CO₂) from the earth's atmosphere.

SPZ

Source Protection Zones

SRA

Somerset Rivers Authority

Subsurface water

Includes all water located in the pore spaces of soil and rocks.

Surface water

Surface water is any water that collects on the surface of the earth. This includes streams, lakes, rivers, reservoirs and wetlands. The vast majority of surface water is produced by rainfall.

Sustainable development

Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

Sustainable Drainage Systems (SuDS)

A range of techniques for holistically managing surface water runoff onsite that aim to mimic more natural drainage processes.

T**TASCC**

Taunton Adventurous Sports and Canoe Club

TPO

Tree Protection Order

Tributaries

A river or stream flowing into a larger river or lake. A tributary does not flow directly into a sea or ocean.

U**Upstream**

In the opposite direction to that which a stream or river flows.

W**Watercourse**

A natural or artificial channel through which water flows.

Water source heat pump

A water source heat pump system extracts heat energy from a water source such as a lake, river or even the sea and uses it to provide hot water and heating to a property.

WEIF

Water Environment Investment Fund

Wetlands

A wetland is a distinct ecosystem that is either covered by water or saturated with water permanently or seasonally.

Wet woodland

Wet woods occur on soils that are often or seasonally wet, either because of flooding, or because of the land form and soil type. Found along streams and rivers; on floodplains and at the edges of lakes; in peaty hollows; and at the margins of fens, bogs and mires.

Winterborne

A stream flowing only after heavy rainfall, especially in winter.

Appendix B

Management and Maintenance Plan

<Link to be inserted to external file>

Appendix C

Surface Water Management Approach

Sustainable Drainage Systems (SuDS) Guidance

Sustainable Drainage Systems (SuDS) offer an approach to drainage that mitigates the impact of new development on flood risk and builds our resilience to flooding. It also provides opportunities to remove pollutants from urban run-off at source, and combines water management with green space, with benefits for amenity, recreation and wildlife.

Local planning policy and decisions on major developments – 10 dwellings or more, or equivalent non-residential or mixed development – are expected to make sure that sustainable drainage systems for the management of run-off are put in place, unless demonstrated to be inappropriate. The current national policy requirement, that all new developments in areas at risk of flooding should give priority to the use of sustainable drainage systems, will continue to apply. With the enactment of Schedule 3 of the Flood and Water Management Act this will be true for ALL

new developments including Non-Major Developments (Less than 10 dwellings).

The LLFAs have their own guidance on sustainable drainage and these must be considered in any development proposal put forward by developers. The LLFAs, Internal Drainage Boards and Highway Authorities may have specific requirements with regards to design criteria for discharge rates, attenuation requirements, routes of discharge etc. It is the responsibility of developers to incorporate these requirements within any scheme presented to planning and/or to Wessex Water for Adoption.

Early pre-application engagement will be necessary to ensure that drainage is considered at the earliest opportunity in the design layout. This will maximise the opportunity for a more integrated multi-functional approach to SuDS. Historically, drainage proposals have been vague at the outset of the planning approvals process and (largely due to pressures and complexities of site layout) are often not defined by developers until too late in the

process. The consequence is that the use of SuDS is often not possible due to the fixing of site details for other reasons – layout of houses, roads etc.

SuDS mimic nature and typically manage rainfall close to where it falls. SuDS can be designed to transport (convey) surface water, slow runoff down (attenuate) before it enters watercourses, provide areas to store water in natural contours and allow water to soak (infiltrate) into the ground or evaporate from surface water and/or from vegetation (known as evapotranspiration).

The SuDS philosophy is to replicate, as closely as possible, the natural drainage from a site before development. SuDS is designed within the opportunities and constraints of a site to deliver the most benefits for water quantity, quality, amenity and biodiversity.

SuDS are not just traditional soakaways, ponds or wetlands, but are a suite of components working in different ways.

The susdrain website provides an overview of the wide variety of SuDS components for review. When selecting SuDS components, the site opportunities and constraints need to be fully considered, it is the schemes that provide a combination of approaches that provide the best results and this is what Somerset Council will be looking for in any future development proposals. In so doing, it is then possible to ensure that the scheme is truly multi-functional and delivers the highest return for the developer and for the community, providing improved resilience and maximising efficiencies for maintenance and operation of the system.

West of England Sustainable Drainage Developer Guide

In 2015 Somerset County Council collaborated with Bristol City, Bath and North East Somerset, North Somerset and South Gloucestershire Councils to develop a SuDS guidance document (Bath & NE Somerset Council, Bristol City Council, North Somerset Council, Somerset County Council and South Gloucestershire Council, 2015).

The guide signposts to existing policy and guidance to support the delivery of a sustainable approach to the drainage of new development in the sub-region. From 6 April 2015, it was expected that local planning policy and decisions on Major Developments (10 dwellings or more; or equivalent non-residential or mixed development) to ensure that sustainable drainage systems for the management of run-off are put in place, unless demonstrated to be inappropriate.

It is understood that Somerset County Council were anticipated to provide details of the character of the County and specific technical and procedural requirements to support this guide. This is in development, however, has not yet been published (see Section 5.2 of this report).

Sustainable Drainage Guide

Somerset County Council, with funding from Somerset Rivers Authority, have developed up-to-date guidance for the delivery of sustainable drainage (SuDS) in Somerset (Somerset Rivers Authority and Somerset County Council, 2022).

The implementation of Schedule 3 to the Flood and Water Management Act 2010 will formalise the use of SuDS on ALL new developments going forward. Schedule 3 provides a framework for the approval and adoption of drainage systems, a sustainable drainage system approving body within unitary and county councils, and national standards on the design, construction, operation, and maintenance of sustainable drainage systems for the lifetime of the development. It also makes the right to connect surface water runoff to public sewers conditional upon the drainage system being approved before any construction work can start.

Government is currently giving consideration to how Schedule 3 will be implemented, subject to final decisions on scope, threshold and process, while also being mindful of the cumulative impact of new regulatory burdens on the development sector. This will include a public consultation, which will collect views on the impact assessment, national standards and statutory instruments. The timetable for its implementation is yet to be defined but the principles for good SuDS design should still be upheld and implemented for all new developments coming forward within Taunton in accordance with the published Somerset SuDS Guide.

Somerset Council may consider the Wessex Water Adoption approach as a starting point ahead of the SAB implementation programme coming forward.

Sustainable Drainage Systems

Urbanisation of a catchment reduces the permeability of the land, replacing free draining ground with impermeable surfaces, such as roofs, roads, parking and other hard landscaping. Development often removes the natural vegetation that intercepts, slows and returns rainfall to the air, reduces the amount of water that can infiltrate into the ground, and this can significantly increase the rate at which water runs off the surface, as shown in Figure 1.

Sustainable drainage systems (SuDS) offer a more natural approach to managing surface water runoff in and around properties and developments than traditional drainage systems. They are designed to temporarily store water during storm events, reduce peak flows and reduce surface water runoff, by mimicking the natural cycle of water management by retaining water where it lands.

The overarching principle of SuDS design is that surface water runoff should be managed for maximum benefit. The benefits that can be delivered using SuDS fit broadly into four categories: water quantity, water quality, amenity and biodiversity. These are also referred to as the four pillars of SuDS design as shown in Figure 2

SuDS can also provide additional benefits:

- A reduction in pressure on local infrastructure e.g. surface water sewers /foul networks
- Encourage positive views of ‘living with water’
- Provide a form of water filtration and attenuation whilst providing attractive spaces
- Lower construction costs
- Opportunity to be used as an educational tool e.g. SuDS to be included within school designs
- Increased amenity values which can increase property values and aesthetic appeal

- Potential to incorporate SuDS as areas of recreational use
- Easy management regimes
- Replenish groundwater / the water table through infiltration
- Provide an opportunity to improve biodiversity within a site

There are opportunities to incorporate SuDS into all development, regardless of site size or previous land use. No two sites are the same so each site should be assessed and evaluated on a case-by-case basis when designing a drainage strategy. Site conditions (topography, geology, presence of surface water bodies, etc.) will inform the drainage scheme.

SuDS Management Train

SuDS systems should be designed holistically and interlock by use of a combination of conveyance and storage systems. The following hierarchy of management techniques as shown in Figure 3 should be considered:

- Prevention - the use of good site design and housekeeping measures to prevent runoff and pollution
- Source control - control of runoff at or very near its source (e.g. the use of permeable/infiltrating drainage or green roofs)
- Site control - management of runoff from specific site sections (e.g. routing water from roofs and car parks to infiltration or using swales to transport water through the site allowing infiltration and evaporation)

Regional control - management of runoff from the entire site or several sites, typically in a storage arrangement such as a detention basins or wetland.

For small developments, particular attention must be given to prevention and source controls, as site or regional controls such as detention ponds may not be practical. The reduction and the treatment of runoff at source will provide the required treatment levels.

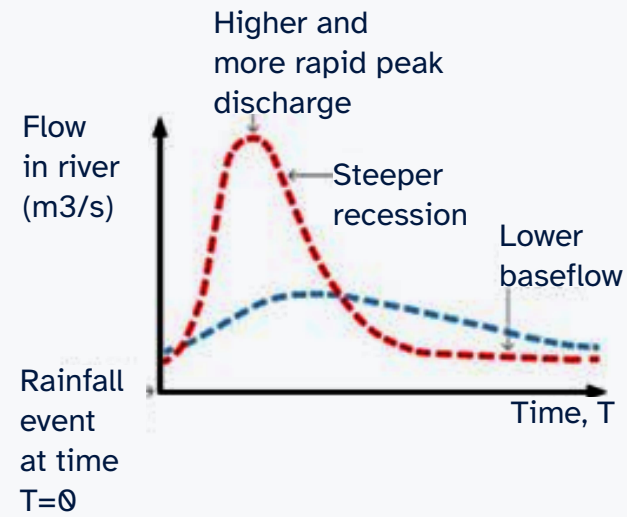
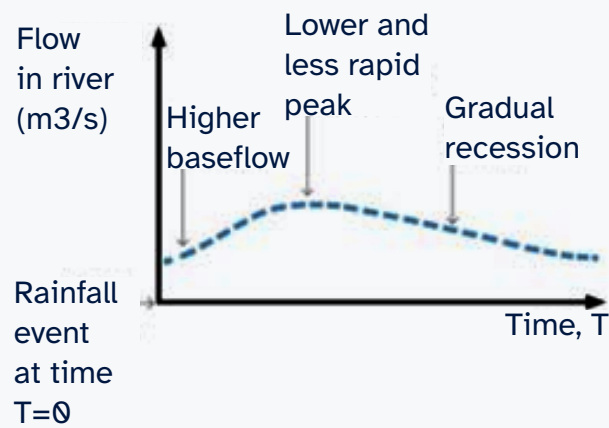
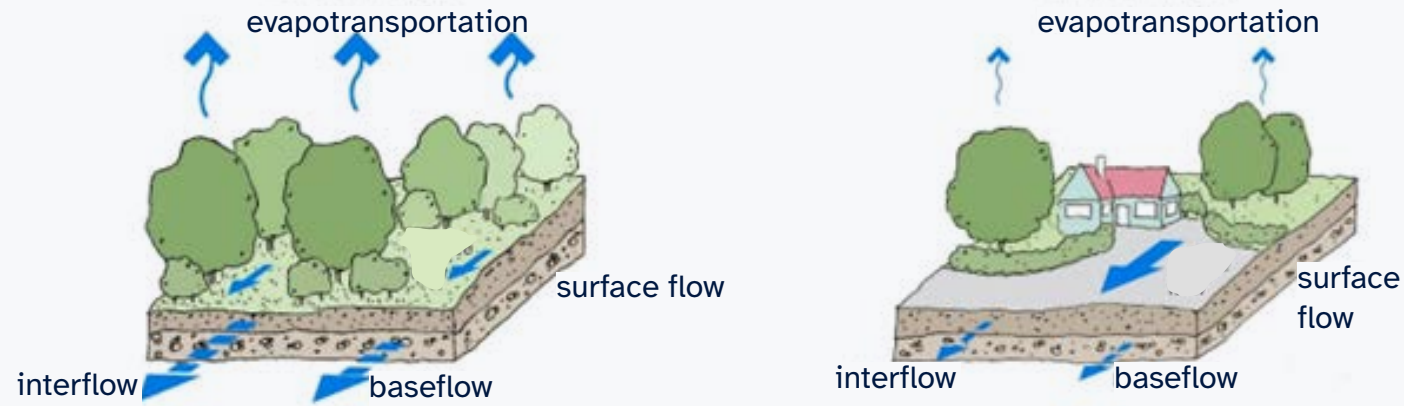


Figure 1: Impacts of Urbanisation on a Catchment (Susdrain)

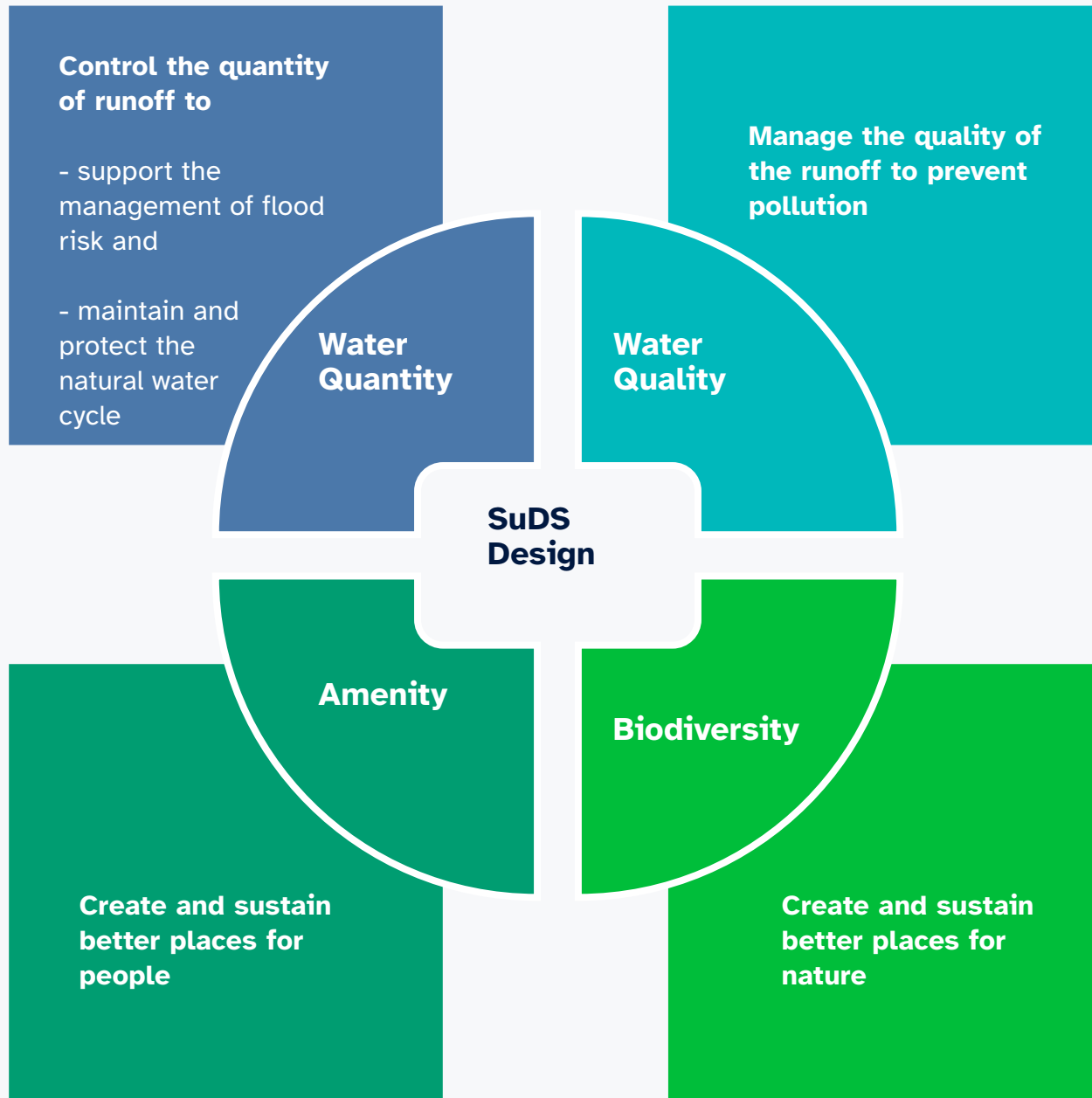


Figure 2: The 4 Pillars of SuDS design (C753:2.1)

Design foresight is required to build SuDS into the developable space. A drainage network incorporating SuDS should initially manage runoff close to its source. This increases the potential treatment of water and minimises the size of downstream storage.

SuDS Features

There are a wide range of SuDS that can be included in the design of a scheme each having different approaches to managing flows, volumes, water quality and providing amenity and biodiversity benefits. The application of SuDS is not limited to one technique per site and often a successful SuDS solution will utilise several techniques in combination.

It is expected that all SuDS features proposed to be implemented as part of any new development will be designed in accordance with the SuDS Manual (CIRIA C753) and the Site handbook for the construction of SuDS (CIRIA C698).

Details including construction and maintenance requirements can also be found in these documents, more information can be also found on the Susdrain website.

Above ground vegetated SuDS features should be prioritised ahead of below ground pipes and tanks. If it is not possible to design a solution using vegetated SuDS features then this is considered an exception. A detailed justification

statement must be included within the sustainable drainage strategy for an alternative proposal which still delivers benefits, for example use of permeable paving, or combination of smaller vegetated SuDS with some underground storage.

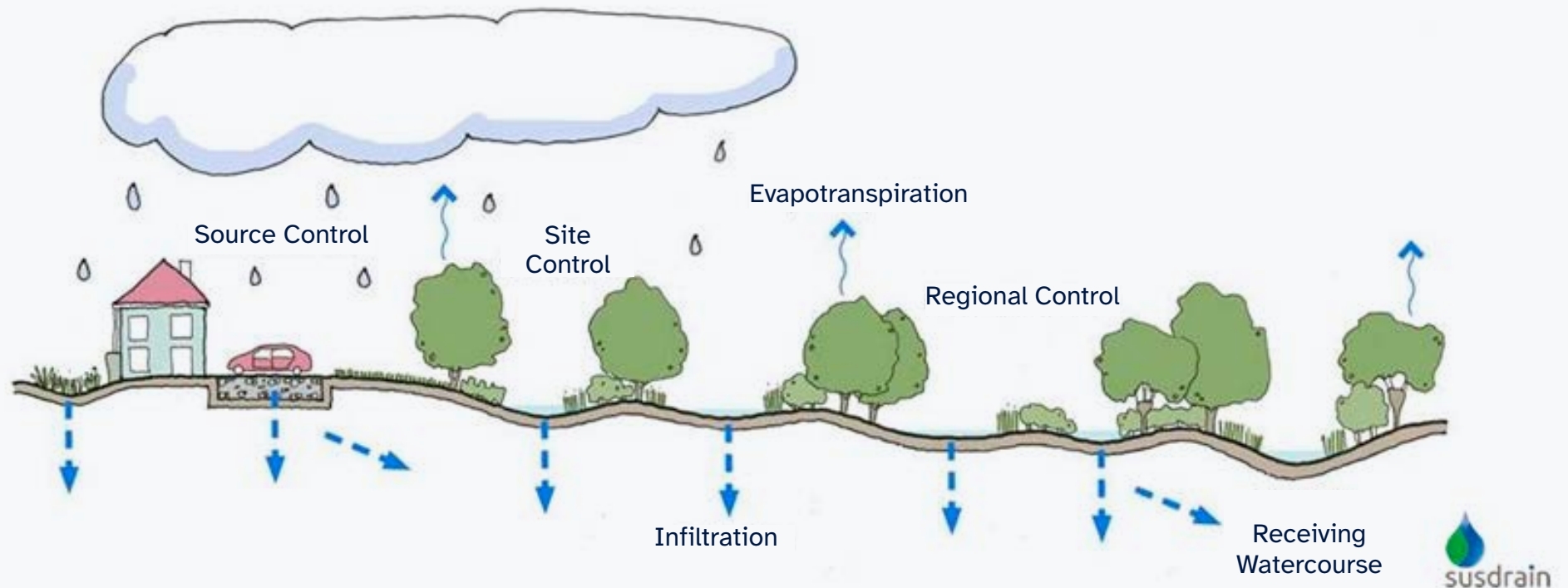


Figure 3: SuDS Management Train (Susdrain)

Source Control

The inclusion of source control in SuDS schemes is one of the more important principles of SuDS design and source control components should be upstream of any pond, wetland or other SuDS component. Source control can help provide interception storage which can handle and treat some of the more frequent but smaller, polluting events.

Most source control components will be located within the private properties or

highway areas. Their purpose is to manage rainfall close to where it falls, not allowing it to become a problem elsewhere. They look to maximise permeability within a site to promote attenuation, treatment and infiltration reducing the need for offsite conveyance.

Rainwater Harvesting

Rainwater harvesting is the collection and re-use of rainwater for non-potable uses, there are two types of rainwater harvesting systems.

An active rainwater harvesting system (ARWH) can be used to manage surface water runoff and can be used for non-potable uses. Active rainwater harvesting systems will include a small overflow for extreme events.

Passive systems are reliant on the householder manually operating them, such as water butts. A passive system will not directly manage surface water runoff but promotes sustainable water reuse.

What are the benefits of rainwater harvesting?

Maintenance schedule	Required Action	Typical frequency
Regular maintenance	Inspection of the tank for debris and sediment build up, inlets/outlets/withdrawal devices, overflow areas, pumps, filters	Annually and following poor performance
	Cleaning of tank, inlets, outlets, gutters, withdrawal devices and roof drain filters of silts and any other debris	Annually and following poor performance
Occasional maintenance	Cleaning and/or replacement of any filters	Three monthly or as required
Remedial actions	Repair of overflow erosion damage or damage to tank	As required
	Pump repairs	As required

Table 1: Operation and maintenance requirements for RWH systems

The main three benefits are:

- lower water bills
- a reduced environmental impact
- helping to cut the risk of localised flooding

Rainwater can replace up to 50% of domestic mains water usage and up to 63% in a commercial property, lowering annual bills by the same amount. By using rainwater to flush toilets, clean clothes and water the garden you'll also cut your CO2 emissions. It takes 1.3kwh of electricity to pump a cubic metre of water to your property – the less you need, the lower the carbon cost of your water supply.

How does it reduce the risk of flooding?

Rainwater harvesting systems help reduce flooding by holding back storm water and slowly releasing it into either drains or soak away over time. This helps prevent sewer systems and water courses from becoming over-stressed and flood risk is reduced.

What can I do with the water?

Everything except drink or consume it. The main things are filling toilets, washing cars, watering the garden and general irrigation usage. It can be used for washing machines and dishwashers however if for use in a dishwasher you may need to filter and purify the water before it can be used for this purpose.

Can rainwater be collected from any roof surface?

Most roof surfaces are perfectly ok to collect from. The most ideal are slate or other smooth non-absorbent materials, and most types of tiles are suitable. Flat roofs will give a reduced collection rate due to puddling and higher evaporation losses. Green roofs are designed to be absorbent so will give a much-reduced yield, and the water will invariably be discoloured so has limited use.

How clean is the water?

If the water is collected from a good surface, a good quality filter is used, and the water is stored in a cool dark place, ideally underground, then the water is extremely clean and should not have any colouration or smell. Under correctly maintained conditions it is difficult for any bacterial action to occur.

What maintenance is required?

Proper operation and maintenance of rainwater harvesting systems helps to protect water quality. Maintenance requirements are largely dependent on the runoff source and the runoff use and thus treatment processes provided. This will range from weekly input through to rare intervention. Routine inspection of the filter system at quarterly annual intervals is advised, even if they do not appear to need specific intervention. There are wide differences in the extent of maintenance required for different systems, and manufacturers guidelines should always be followed.

Table 1 provides guidance on the type of operational and maintenance requirements that may be appropriate.

For further information and explanations please see Section D (11) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

Green Roofs

Green roofs are areas of living vegetation, installed on the top of buildings for a range of different benefits including, visual benefits, increased ecological value, enhanced building performance. Green roofs are designed to intercept and retain precipitation, reducing the volume of runoff and attenuating peak flows.

Types of green roofs

Extensive green roofs cover the entire roof with hardy, slow growing, drought tolerant, low maintenance plants (e.g. mosses, herbs, grasses) often enhanced with wildflowers.

Benefits include; lightweight, suitable for roofs with a slope up to 1 in 3, often suitable for retrofits, little management of vegetation, little/no need for irrigation and specialised drainage systems.

Intensive green roofs (or roof gardens) are designed to sustain more complex landscaped environments that can provide high amenity or biodiversity benefits; easily accessible.

Benefits include; more favourable conditions for plants, good contribution to the thermal performance of buildings, attractive, accessible –

can be used for recreation, good surface water retention capacity.

For further information and explanations please see Section D (12) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

Permeable Surfaces

Permeable surfacing provides a pavement suitable for pedestrian and/or vehicular traffic, whilst allowing rainwater to infiltrate through the surface and into the underlying structural layers. Water is temporarily stored beneath the overlying surface before infiltrating into the ground.

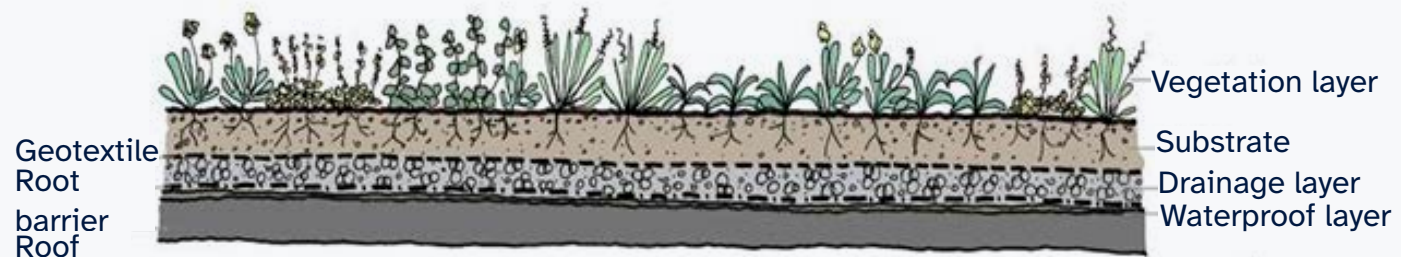


Figure 4: Green Roof (Susdrain)

Permeable paving can be constructed with various materials including (but not limited to) block paving, resin bound gravel and porous asphalt.

Types of permeable surfacing

- Permeable pavements - made from impervious material, void space created
- Porous pavements - infiltrate water across their entire surface material

There are three different types of paving which allow for the use of this component throughout a wide range of sites and site conditions:

- Type A – Also known as full infiltration, this allows all rainfall to pass into the sub-base, before infiltrating into the soil. There is normally no discharge from the permeable paving system to a watercourse or sewer; however, there may be an emergency overflow
- Type B – Also known as partial infiltration is where a proportion of the surface water runoff that exceeds the infiltration capacity of the subsoils is conveyed to a receiving drainage system

- Type C – This does not provide any infiltration and is used primarily as an attenuation storage following filtration through the sub-base. The system is generally wrapped in an impermeable, flexible membrane before being discharging to the outfall

For further information and explanations please see Section D (20) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

Soakaways

Soakaways are an infiltration component consisting of excavations filled with a void-forming material that allows for the temporary storage of water before it soaks into the ground. Soakaways often constructed with geocellular units, pre-wrapped in geotextile.

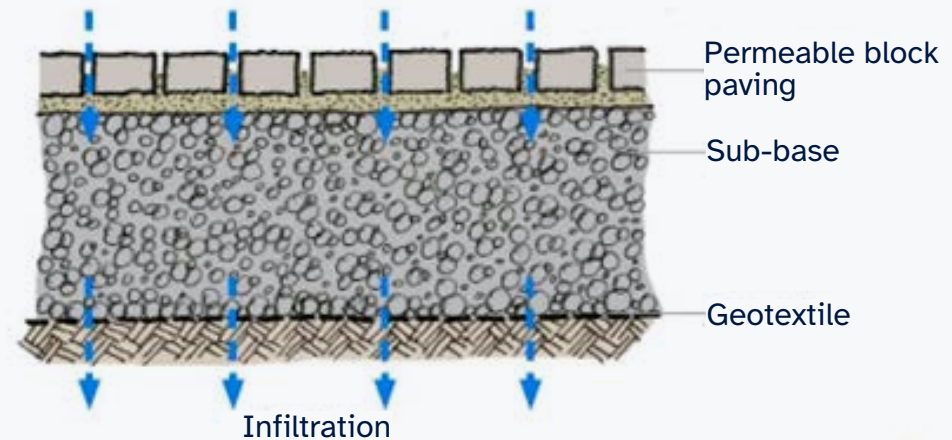


Figure 5: Permeable Paving Type A/B (Susdrain)

For further information and explanations please see Section D (13) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

Rain Gardens

Bio-retention systems (including rain gardens) are shallow landscaped depressions that can reduce runoff rates and volumes and treat pollution using engineered soils and vegetation.

Typically rain gardens are small systems, less engineered than full bio-retention components. These systems are generally used to manage and treat runoff from more frequent (smaller) rainfall events. Rain gardens should generally not have impermeable liners unless there is a specific need to prevent water from infiltrating.

For further information and explanations please see Section D (18) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

Channels and Rills

Channels and rills are open surface water channels with hard edges. They are simply channels that water flows along whereby they can have a variety of cross sections to suit the urban landscape, including the use of planting to provide both enhanced visual appeal and water treatment.

Treatment channels collect water, slow it down and provide storage for silt and oil that is captured. The outlets are designed to act as a mini oil separator; hence the channels can be very effective at treating pollution.

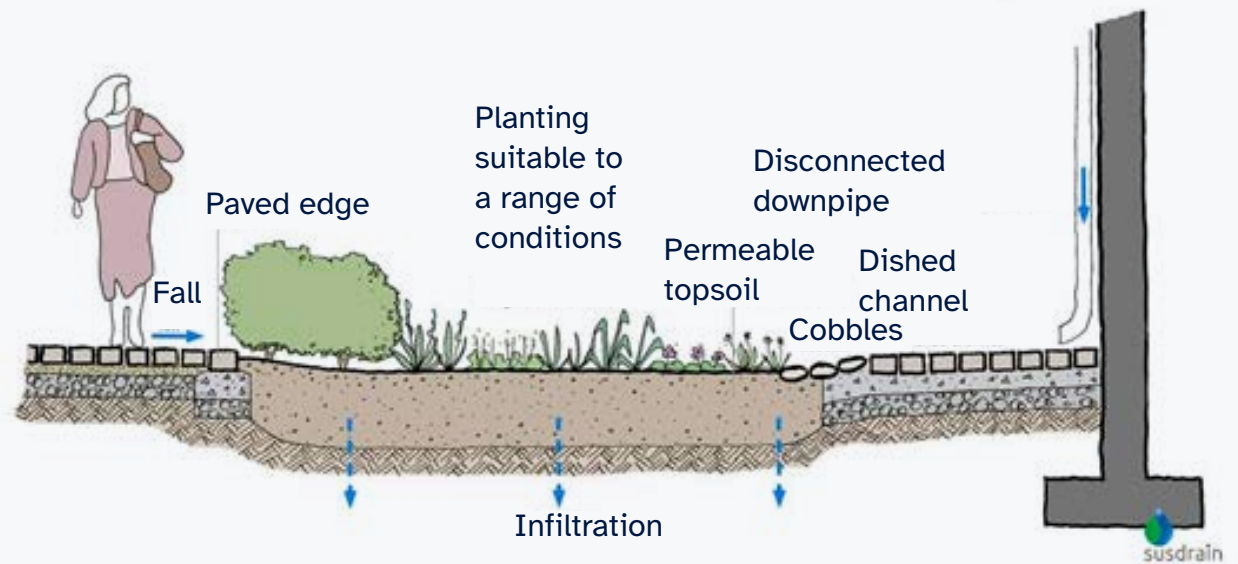


Figure 6: Raingarden (Susdrain)

Swales

Swales are shallow, flat bottomed, vegetated open channels designed to convey, treat and often attenuate surface water runoff. Standard swale channels are broad and shallow, covered in vegetation (usually grass) to slow the water and provide a range of other benefits.

Types of Swales

- Conveyance and attenuation swales – an effective way of collecting and conveying runoff from the drained area to another stage of the SuDS management train. They can be designed for treatment and/or attenuation (CIRIA, 2015)
- Dry swale (or enhanced swale) – a vegetated conveyance channel, designed

to include a filter bed or prepared soils that overlays an underdrain system which provides additional treatment and conveyance capacity. Can be lined in areas of high groundwater (CIRIA, 2015).

- Wet swale – equivalent to the conveyance swale, but designed to deliver wet and/or marshy conditions in the base (CIRIA, 2015).

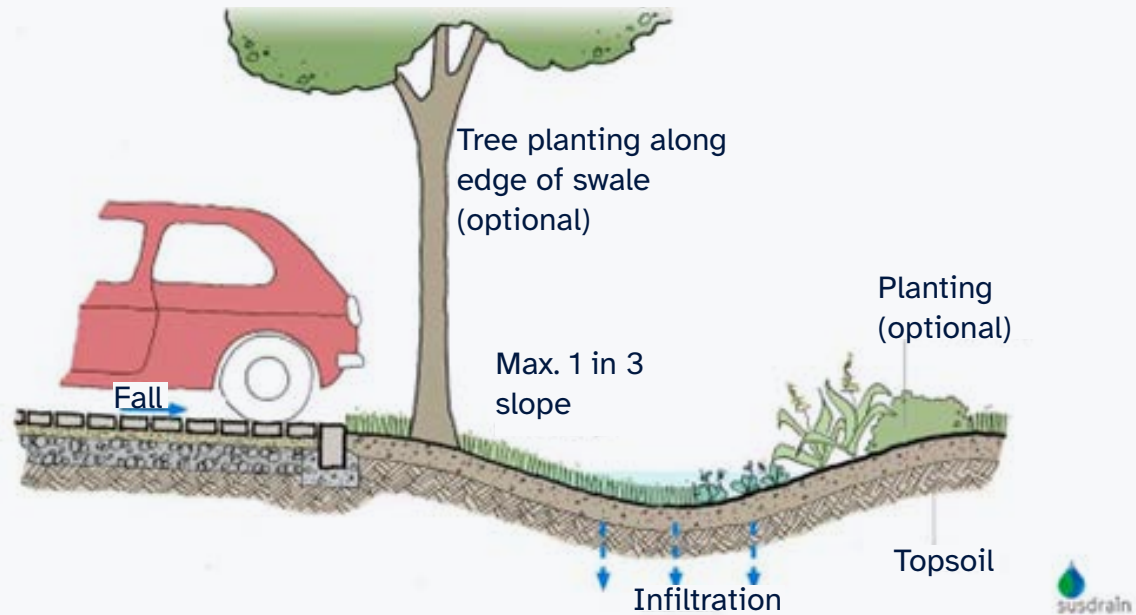
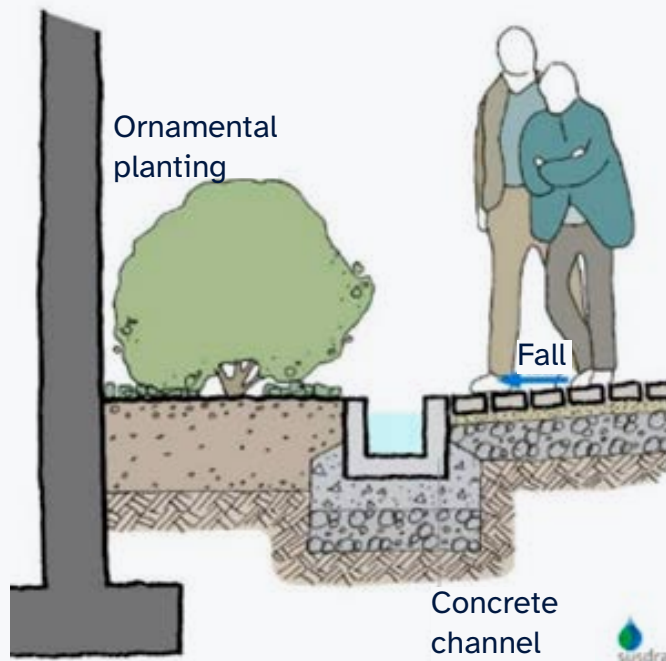


Figure 7: Rills and Treatment Channels (Susdrain) Figure 8: Swale (Susdrain)

For further information and explanations please see Section D (17) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

Filter Strips

Filter strips are gently sloping, vegetated strips of land that provide opportunities for slow conveyance and infiltration (where appropriate). They are designed to accept runoff as overland sheet flow from upstream development and often lie between a hard-surfaced area and a receiving stream, surface water collection, treatment or disposal system.

The main purpose of the filter strip is to remove any silt in the water so that it does not clog up downstream components. They treat runoff by vegetative filtering, and promote settlement of particulate pollutants and infiltration.

Filter trenches provide a similar function to filter strips. They are shallow excavations filled with rubble or stone that create

temporary subsurface storage for infiltration or filtration of runoff. These trenches can also be used to filter and convey storm water to downstream SuDS components. Ideally filter trenches should receive lateral inflow from an adjacent impermeable surface, but point source inflows are also acceptable.

Trees

Trees can help to protect and enhance the urban environment in several important ways. Within a development, trees can be planted amongst a range of infiltration SuDS components to improve their performance, alternatively they can be used as standalone features such as, tree pits/ planters or structural soils.

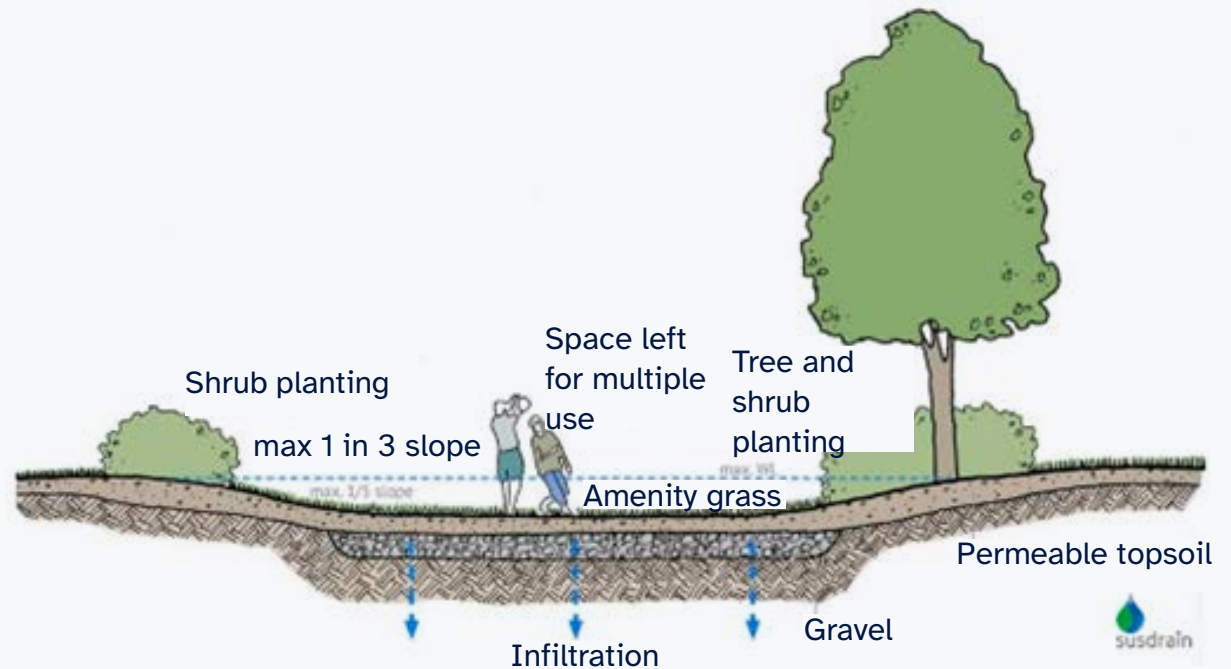


Figure 9: Infiltration Basin (Susdrain)

For further information and explanations please see Section D (19) of the CIRIA SuDS Manual 2015 (C753) and Susdrain.

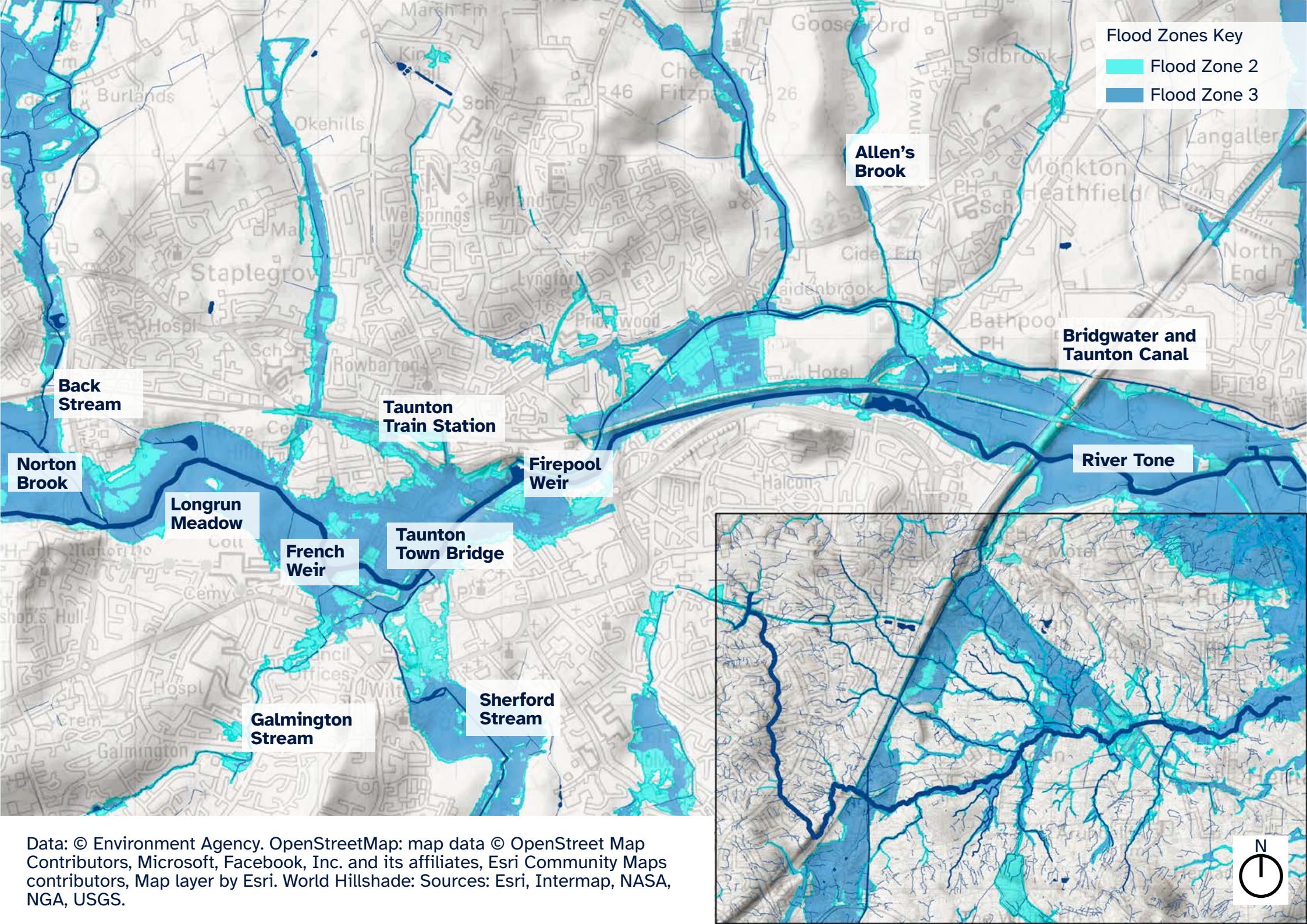
Basins, Ponds and Wetlands

Basins are landscaped depressions, usually dry except during and immediately following storm events. These components can be designed as 'online' or 'off-line'.

Ponds and wetlands are features with a permanent pool of water that provide both attenuation and treatment for surface water runoff. 'Wetland' is used to describe a body of water with larger proportions of the surface covered by aquatic planting. Both can support emergent and submerged aquatic vegetation, aiding in the treatment process.

Appendix D

TWSG Strategies / Floodzones



Flood Zones Key

- Flood Zone 2
- Flood Zone 3

Allen's Brook

Bridgwater and Taunton Canal

Back Stream

Taunton Train Station

River Tone

Norton Brook

Firepool Weir

Longrun Meadow

French Weir

Taunton Town Bridge

Galmington Stream

Sherford Stream

Data: © Environment Agency. OpenStreetMap: map data © OpenStreet Map Contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri. World Hillshade: Sources: Esri, Intermap, NASA, NGA, USGS.



Appendix E

TWSG Strategies / Mobility Hubs



CITY SCIENCE
endless possibilities

City Science and CoMoUK Guidance

Mobility Vision – Guiding Principles

- Mobility interventions will be guided by net zero carbon considerations
- Mobility services will be safe, sustainable, convenient and widely accessible
- Active travel will remain the preferred option for short journeys.
- Mobility hubs will be developed as a way of improving access to key services
- Users will be at the heart of the mobility strategy ensuring designs are inclusive and tailored to the needs of future residents, employees, and visitors
- Infrastructure proposals will be future-proofed to allow for changes in mobility options and trends, where appropriate.

Strategic Context

The policy landscape is changing, policy makers and decision makers at all tiers of government are placing a greater emphasis on the need to decarbonise transport and how the uptake of public transport and active travel modes can deliver substantial social, environmental and economic benefits.

To deliver meaningful change and to meet legally binding net zero targets, there is a recognised need to make public transport, walking, wheeling and cycling the natural first choice for all who can take it.

For new development, this revolves around the process of embedding sustainable travel behaviours from the onset through user-centric design, avoiding a ‘car culture’ from arising.



- “Transport is the UK’s largest polluting sector, producing nearly 20% of its total emissions. The majority of emissions come from road transport vehicles (91%), in which cars and taxis are the largest contributors (61%).”
- “The majority (68%) of UK trips undertaken are under 5 miles, with 19% of trips being less than 1 mile in length. These short trips are amenable to walking and cycling for most people and are particularly relevant areas of focus for improving air quality and noise as they contribute disproportionately to emissions.”
- “91 million days are lost each year due to mental health problems. An increase in physical activity has been proven to be associated with benefits to mental health. Physical activity can reduce the risk of depression, dementia and Alzheimer’s and costs the NHS up to £1 billion each year.”

- “20-minutes of exercise each day cuts the risk of depression by up to a third, boosts worker productivity and reduces the time spent seeking medical care through individuals leading active and healthy lifestyles.”
- “High-quality active travel infrastructure increases the likelihood of people choosing to walk, wheel or cycle within existing and new neighbourhoods and encourages local businesses to thrive. People who travel to the high street by active modes can spend up to 40% more than those who drive.”

Mobility Hubs

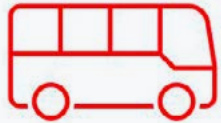
“A mobility hub is a recognisable place with an offer of different and connected transport modes supplemented with enhanced facilities and information features to both attract and benefit the traveller.” (Como-UK)

Hubs are not ‘one size fits all’, and tailor-made solutions need to be created for each location, considering type of components, scale and levels of service.

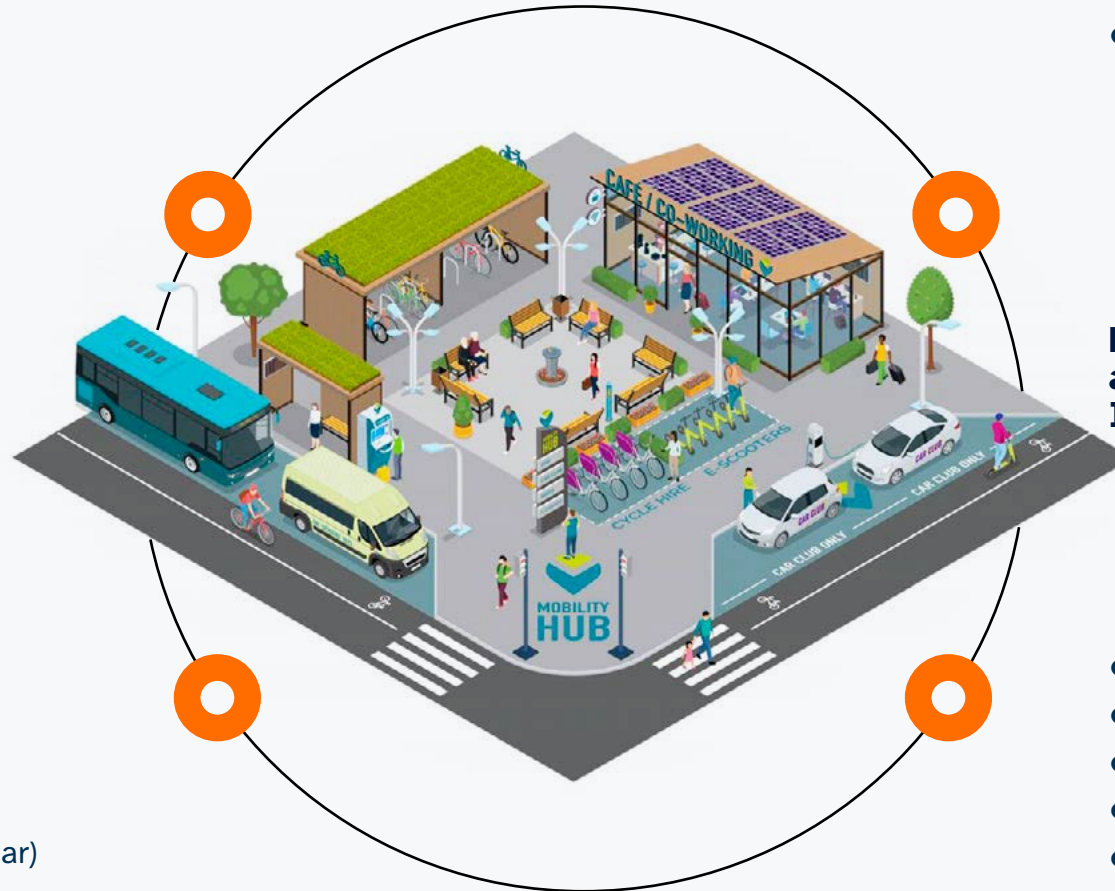
Any Mobility Hub is underpinned by a series of overarching objectives:

- **Inclusive Mobility** – Providing an attractive range of sustainable transport modes, encouraging individuals out of their private vehicles
- **Healthy Streets** – Facilitate safe, clean and high-quality places through improving the public realm, reducing severance, enhancing accessibility and provide wayfinding
- **Vibrant Neighbourhoods** – Provide gateways into local communities, providing the opportunity to offer new places to gather and the ability to access jobs, education and leisure opportunities

- Bus Routes/local re-routing etc.
- links to Taunton Town Centre and neighbouring settlements such as Minehead and Seaton



Mobility Components (Non-public Transport)



- Co-working space
- Retail/Leisure space
- Parcel lockers/Click and Collect points
- Play areas/Open green space/Play pitches



Non-Mobility and Public Realm Improvements

- Shared mobility services
- Car Clubs
- Docked/dockless shared e-scooter schemes
- Brompton Bike Hire (or similar)



Mobility Components (Non-public Transport)

- Cycle parking
- e-bike/scooter charging points
- Cycle maintenance
- Digital Wayfinding
- Real Time Information



Mobility Related Components

Mobility Hub Hierarchy

The spatial distribution of Taunton coupled with the River Tone bisecting it lends itself to a Mobility Hub Strategy that follows as 'hub and spoke' approach whereby any network adopts a hierarchy of mobility hubs that provide various transport and non-transport elements depending on their location.

This would include small-scale neighbourhood and secondary hubs in the town's peripheral areas within proximity to existing key transport corridors and key destinations as well as larger-scale central hubs within the urban core of Taunton, along its riverfront. Through these hubs providing a variety of sustainable transport offering such as public transport and active travel alongside potential to include mutually supporting community facilities, delivery will enable positive mode shift onto low-carbon modes whilst also contributing towards improved safety, environment and place.

It is envisaged that these hubs will be delivered either as part of the development of key site allocations within the current Local Plan such as at Tangier and Morrisons, or as part of the redevelopment of existing available land (such as University Centre Somerset). There is already a positive precedent being set for the implementation of mobility hubs as demonstrated through the identification of facilities within the masterplan for Firepool which is currently being built out which includes proposals for a mobility hub as part of the wider reopening of the bus station. These hubs would be further developed and refined as proposals for redevelopment of Taunton's Waterways as well as for its surrounding areas evolves.

Work undertaken on behalf of Somerset Council by WSP (Somerset and Devon Mobility Hub Strategy, 2023) considered a range of corridor, campus, interchange, community, rural and tourism hubs. The study identified Taunton Railway Station, the proposed Comeytrow and Trull New Garden Community within Taunton and the proposed Monkton Heathfield New Garden Community to the northeast of Taunton as potential locations for mobility hubs.



Mobility Hub Funding – Initial Considerations

Identification of funding for any Mobility Hub proposals is essential from the onset to ensure that there is a valid financial and commercial case for delivery, capitalising upon the opportunity for funding to be sourced either the public and private sector or both.

Whilst the cost for any proposals will depend upon their scale, size and overall offering, the ability to integrate existing services (e.g. bus routes) and make use of underutilised land where possible will assist keeping initial capital costs at a manageable scale. The pace of Mobility Hub delivery across the UK has intensified in recent years, with there now being a ‘pool’ of appropriate case studies to assist in planning and delivery.

A further key consideration as part of the affordability of any Mobility Hub Strategy is the consideration of the operational model, and who would be responsible for

operating and maintaining any facilities and their associated offerings. Some hubs will be wholly or mostly owned by the public sector (Huntly’s community owned Green Travel Hub); others will be wholly private sector owned (BP’s Berlin Mobility Hub); others still will adopt a hybrid ownership model. Many will transition from one model to another over time – most commonly from public to private ownership. In terms

of revenue generation, the answers will vary from site to site, so having some degree of flexibility is of paramount importance.

Lastly related to affordability is the procurement model that would be adopted and whether it would be led by the public or private sector or whether, in a similar theme to operational aspects, a hybrid approach would be implemented.

Funding Schemes

Developer Contributions (i.e. S106, Community Infrastructure Levy)

Local Authority Funding (i.e. Somerset Council)

Revenue Streams

Commercial Revenue (e.g. Retail Unit Rental, Advertisement, Sponsorship)



SLR Guidance - Mobility Hubs

Enabling placemaking and low carbon masterplanning Responding to the growth in demand for shared mobility

1.0 Background

The uptake of new mobility services over recent years has been significant, fuelled by new technologies making them easy to use, convenient and affordable. They provide an opportunity not just to fill gaps in the public transport network, but to also help local planning authorities work towards decarbonising the transport and planning sectors, improve air quality and public health.

Bike, eBike and eScooter share schemes, as well as car clubs and demand responsive transport are being rolled out in increasing locations helping people to reduce their car dependency. With research showing a fall in UK driving licence ownership amongst younger generations, such mobility options are becoming more essential to provide communities with the accessibility levels

they need, affording economic, social and environmental co-benefits.

One of the external impacts of the COVID-19 pandemic has been an accelerated change in mobility behaviour, flexible and remote working, online shopping and greater local living. The rise of 15-minute neighbourhoods as a planning concept is a result of this growing desire to have more amenities within a short walk or cycle, making communities more vibrant and resilient. Mobility hubs are helping to enable this transition and form part of the overall Vision and Validate approach to transport planning.

This approach involves the planning industry thinking of transport infrastructure holistically, placing greater emphasis on sustainable movement, active travel networks, local business, health and wellbeing rather than simply enhancing highway capacity to accommodate future traffic demand.

Planning should also recognise that many journey purposes are today fulfilled “virtually” with 30% of retail shopping done online, and on average a quarter of people working from home at any one time. As set out in the DfT’s Decarbonisation Plan, Vision and Validate is taking the place of the now defunct Predict and Provide approach.

In tackling climate change as an industry, we must challenge the need for outdated infrastructure and support local planning authorities in delivering placemaking and sustainable mobility through the planning process. This is in harmony with the three overarching objectives of the NPPF which require demonstrable impacts in the fields of climate, health and economy.

2.0 Introduction

Mobility hubs locate shared and public transport modes together, enabling attractive and seamless journeys whilst reducing car dependency and carbon emissions.

Hubs may also offer amenities – concierge, co-working space, cafés and bike repair - making them the heart of the community and reducing the need to travel.

Hubs come in different shapes and sizes offering convenient and real alternatives which can be flexibly selected to serve the chosen community. They can be located in new or existing residential areas, business parks, town centres, shopping centres and rural or suburban areas.

For new strategic developments, mobility hubs should be carefully designed as part of the masterplanning process and set up as a network of interconnected small and large hubs.

One of the key factors for ensuring the success of shared mobility services and mobility hubs, is supporting behaviour change methods. These include real time journey planning information, integrated mobility as a service, bike and car share mobile phone applications, discounts, incentives, prizes, reward points and so on.

Another key factor is understanding the financing models for mobility hubs. Capital costs can be shared amongst several stakeholders through planning obligations, as well as the mobility operators. Revenue costs can be shared between multiple organisations but also supported by attracting a café, bike workshop or co-working to share the floorspace, mutually creating footfall and a vibrant community.

SLR offers a unique mobility hub design and delivery team which draws on its combined masterplanning, architecture and transport planning disciplines.

2.1 Mobility hub hierarchy

Strategic residential, mixed-use and commercial developments are best served by a connected network of mobility hubs to maximise accessibility and connectivity with the public transport network.

They should be connected via active travel corridors allowing easy access using shared bike, eBike, eScooter and cargo bikes. This enables car free lifestyles inside

the development and provides access to the amenities within the 15 minute neighbourhood design. The primary hub also serves as a community centre with additional facilities, plus public transport and Digital Demand Responsive Transport (DDRT) for onward connecting trips.

SLR applies a three tier hierarchy in the planning and delivery of mobility hubs as follows. There is a large degree of flexibility of application, depending on the site. The component mobility services and supporting features grow cumulatively at each tier.

- Tertiary: basic mobility services, to enable connection with larger hubs and the wider community
- Secondary: includes tertiary components plus additional mobility modes and supporting features to serve a larger catchment
- Primary: includes tertiary and secondary components plus a wider range of mobility modes, public transport connections and supporting features making it a local centre. Onward travel to main destinations

Mobility hub hierarchy

Hub type	Hub type	Hub type
Tertiary Mobility Service <ul style="list-style-type: none"> ● Car club bars ● Cycle share ● Cycle parking ● Bus stop (walking distance) ● eScooter share 	Secondary Mobility Service <ul style="list-style-type: none"> ● EV car club bays ● EV charging points ● eBike share ● DDRT virtual bus stop ● Secure cycle parking 	Primary Mobility Service <ul style="list-style-type: none"> ● Bike repair workshop ● Concierge and travel advice ● Cargo Bike ● Brompton Bike hire ● Public transport options
Supporting features <ul style="list-style-type: none"> ● Step free access ● Branding ● Street Lighting ● Seating 	Supporting features <ul style="list-style-type: none"> ● Bike pump ● Water fountain - outdoor ● Bike repair mini-station ● Covered seating 	Supporting features <ul style="list-style-type: none"> ● Step free access ● Branding ● WiFi ● Parcel lockers plus last mile delivery (ground drone) ● Realtime PT and wayfinding totem ● Cafe and Co-working space



Tertiary Mobility Hub (SLR)

The tertiary mobility hub might offer cycle parking, cycle and eScooter sharing as well as car club cars. Ideally it should have a bus stop close by. Branding and street lighting are important to make users feel safe. It would be located in more peripheral locations to fill gaps in the public transport network.



Secondary Mobility Hub (SLR)

The secondary hubs are larger in scale as they accommodate greater footfall. Therefore they might offer secure cycle parking, EV car clubs, EV charging points, eBike share, DRT and a bus stop. They would also offer more supporting features such as shower, toilet, bike repair station, water fountain, seating and maybe even a café kiosk.



The primary hub would serve a larger catchment and offer the greatest quantity of mobility services. Most importantly though it would act as the community centre and hence offer a selection of additional amenities such as: café, bike repair workshop, concierge, parcel collection, real time travel information and co-working space.

Primary Mobility Hub (SLR)

2.2 Avoid-Shift-Improve framework

SLR applies the Avoid-Shift-Improve framework to its transport planning services, to maximise placemaking and sustainable mobility systems in new and extended developments. Avoid-Shift-Improve is a key component of vision-led planning where places are designed around the collective needs of people rather than prioritising private transport. This simultaneously realises co-benefits by minimising carbon emissions and maximising liveability, health and biodiversity. This hierarchy is as follows:

- **AVOID Trips:** Provision of local amenities to reduce the need to travel. Support online services to maximise 'virtual' mobility
- **SHIFT Modes:** Make provision for active, shared and public forms of transport
- **IMPROVE Fuels:** For any trips that must be made by car, ensure charging infrastructure is available for Zero Emission Vehicles



Avoid-Shift-Improve framework (SLR)

Mobility hubs are uniquely placed to enable all three levels of the Avoid-Shift-Improve framework. They are therefore an important part of many vision-led planning schemes. This is evidenced further in the following chapters.

2.3 Snap shot of current demand for shared mobility

There is a significant demand for shared mobility services in the UK as illustrated

in the graph below showing the results of the 2023 Statista survey question: “Which of these services have you booked online (website or app) in the past 12 months?” Multiple answers were possible.

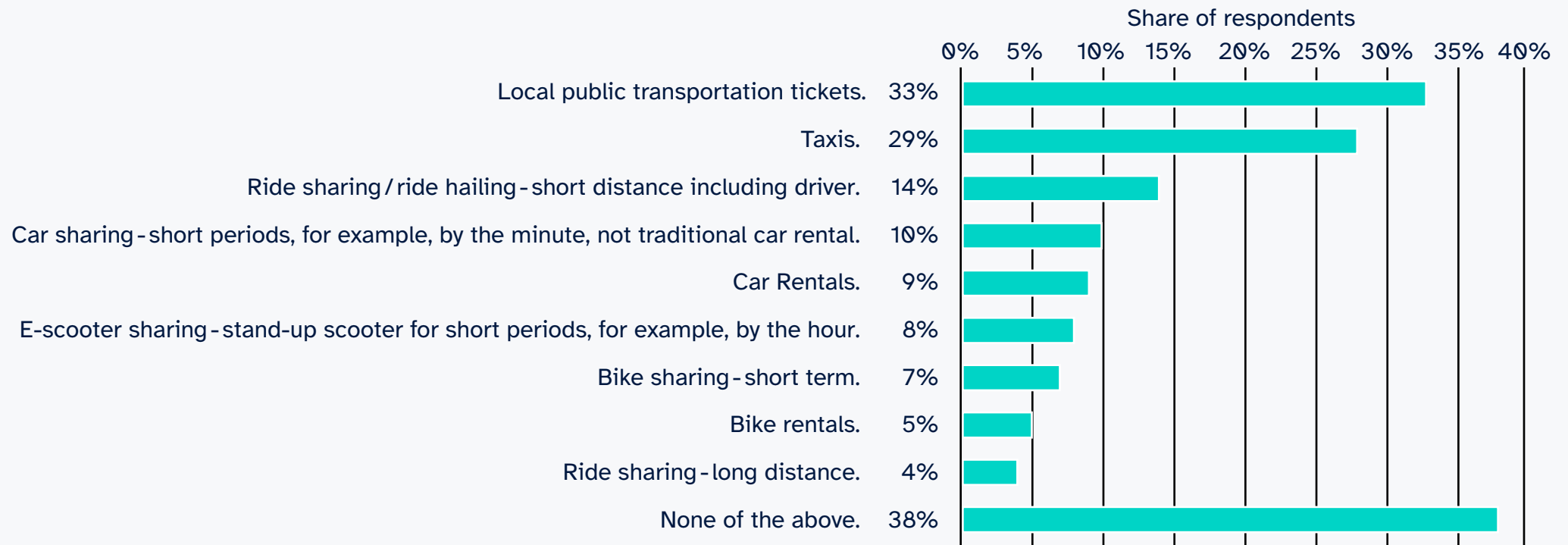


Figure 5: **Mobility service online bookings in the UK as of March 2023**

Source: Statista Consumer Insights; ID 997887. Notes: United Kingdom; April 2022 to March 2023; 18-64 years; 4028 respondents

The percentage of respondents who have used such modes within the last 12 months include ride sharing (e.g. Uber) 14%; car sharing (car club) 10%; eScooter 8%; and bike share 7%.

Whilst this is a survey based only on 4,000 respondents, it is indicative of the changing ways in which people travel today, compared to 15 years ago when these percentages would all have been close to 0%. It shows that these services need to be included in the design of new developments, especially to attract the generations who have grown up using such mobility as standard.

3.0 Mobility hubs: avoid trips

Changes to working and shopping habits, supported by technological advances, have seen significant increases in home working and online retail sales and deliveries. This has been reinforced due to the effects of COVID-19 on behaviour.

Mobility hubs offer great potential to respond to these growing trends.

3.1 Co-working space

In May 2021, [a global Accenture survey](#) found that “76% of 9,650 people said they want a “third place” to work that is outside of their homes and the traditional office”.

Since then, working from alternative locations has boomed. [IWG](#), which operates under brand names such as Regus and Spaces among others, reported an average 54% increase in visits to their workspaces between January to November 2022.

They also reported that [demand for flexible workspaces away from busy city centres had increased by more than a third](#) (36%) in 2022. Locations such as Bolton, Cardiff, Hemel Hempstead and Chelmsford are among the locations with the biggest rise in footfall, at increases of 190%, 190%, 140% and 112% respectively.

This supports the increasing trends seen towards more flexible working (JLL Workforce Preferences Barometer, 2022):

- 36% of employees work in third places on a weekly basis
- 55% hybrid work, meaning they work from at least two different locations; and
- 33% are interested in gaining access to coworking facilities or satellite offices closer to their home

Today, approximately 25% of people are working from home at any one time on average, compared to approximately 15% before COVID (SLR's Working from Home tool). Some industries are seeing much higher rates such as Information and Communications 53% and Financial Services 40% (ONS Business Insights and Conditions Survey 2023).

This illustrates the potential demand for such third place working in local communities which can be accommodated in the design of primary mobility hubs.

3.2 Parcel collection and delivery

Online retail in the UK has been gaining ground in the past decade. The value of online retail sales in the UK was estimated at £120bn in 2021, or 29% of the market share. Clothing and household goods are the most popular items. For 2025, the forecasted retail eCommerce sales is projected to reach 38% which implies even greater delivery vehicle miles travelled. There is therefore a growing need for local consolidation, parcel collection and last mile delivery services within communities.

Mobility hubs can be designed to include concierge services, parcel lockers and eCargo bike or ground drone deliveries such as those circulating in Milton Keynes operated by Starship.

4.0 Mobility hubs: shift modes

Mobility hubs offer shared bikes, ebikes, car club cars, cargo bikes and secure cycle parking to make such modes the natural first choice for many users. They therefore respond to the significant growth in demand for shared mobility services over the last ten years, and support national and local government targets to shift away from car use especially for trips of short distances.

4.1 Car club

Car clubs can significantly reduce the reliance placed on the private car, by providing access to a vehicle as and when it is required. [This removes the need to have a vehicle idling in a driveway being unused for 96% of the time](#), and frees up street space for other amenities and biodiversity.

On average, one car club vehicle removes between 13 and 22 private cars from UK

roads. [The 2022 car club study by CoMoUK](#) found that each car club vehicle replaces 22 private cars in the UK.

[This is an increase on the previous 20 vehicles reported in 2021](#), and 18.5 vehicles reported in 2020. This is highly dependent on location, with one vehicle removing up to 24 private cars in London in 2021. This was also supported by [Zipcar](#) who quoted each of their vehicles removes 23.5 private cars. This is compared to approximately 8.5 private cars in Exeter (Co-Cars). One factor influencing these numbers is that members often sell (or don't replace) a private vehicle when they join the scheme. 22% of car club members said that they would have bought a car if they had not joined a car club. Alongside removing private vehicles from the roads, active car club members use cars up to two-thirds less often than private vehicle users.

In areas with high concentrations of car club cars such as London, and where there are parking and access restrictions, significant impacts can be seen on private vehicle ownership and use:

- 28% of car club members based in London have reduced the number of vehicles owned by their household since joining a car club, of which 53% report that the car club was the main factor; and
- 85,552 is the estimated total number of cars that have been removed from London roads by currently active car club members (source: CoMoUK London Car Club Report 2021).

In the 2021 car club report, CoMoUK estimated that a total of 116,811 cars had been removed from UK roads by active car club members (source: CoMoUK London Car Club Report 2021). This estimation was calculated from the number of active car club vehicles, the number of active members, and the number of vehicles that each car club car removed from the road. This was an increase from the 99,355 estimate from 2020.

Research by the Energy Savings Trust showed that reducing grey fleet use – private vehicles that staff use for work purposes – can result in up to 25% less car travel overall, as staff no longer gain

workplace-related benefits from using their own cars (DfT 2015. A guide to managing grey fleet mileage. Energy Saving Trust).

4.2 Digital Demand-Responsive Transport (DDRT)

DDRT is a modern, user-orientated form of public transport, with flexible routing, pick-up, and drop-off locations, with timetabling matched to passenger needs. To keep the service flexible and responsive, users are often directed to a local bus stop, or, in less connected areas, virtual bus stops can be formed, where passengers are directed to a convenient street for pick-up. DDRT has the potential to provide services as and when required without the need to provide a service throughout the day at times when demand may be less. This can lead to a more efficient and effective economic model for providing mobility.

In New Lubbethorpe, a new housing development in Leicester, within 2 months of an Arriva Click DDRT service launching, there were more than 12,000 accounts, with more than 2,500 weekly

journey requests (Source: Arriva Click). It served residents of the new community as well as those in adjacent areas to gather a critical mass of users. It was used for commuting, leisure, and education purposes. The service is now being taken forward by Vectare, using technology provider Padam Mobility.

A survey undertaken for another of Arriva Click's operations in Liverpool (February 2019) showed the modes previously used before shifting to DDRT (Source: Arriva Click):

- 45% local buses
- 21% taxis
- 18% car driver
- 6% walked
- 5% travelled by train
- 2% car passengers and
- 2% cycled

These shifts away from private vehicles are supported by other DDRT services across the UK. Tees Flex, operating through the Tees Valley, provides a service of roughly 1,500 journeys per week to a user base of nearly 10,000, indicating wide adoption by the local community. Their data shows that 62% of passengers reported using their private cars less frequently.

fflecsi, operating throughout Wales, also reported that 73% (Stats provided by Via) of their users had been able to reduce their private car usage due to the DRT service provision.

Arriva Click research showed that their DDRT services saw up to 40% of passengers moving out of cars and up to 56% using the service to avoid having to find a parking space at their destination.

These statistics support the effect that DDRT can have in local communities to reduce reliance on single-occupancy vehicles and thus forms an important component in serving tertiary, secondary and primary mobility hub locations.

4.3 Bike sharing

CoMoUK conducts annual surveys into bike sharing. These are compiled in conjunction with accredited UK bike share operators, who provide CoMoUK with statistics on membership numbers, bike fleets and other indicators to highlight the latest trends in the sector. These are combined with the results of questionnaires distributed to members of these UK bike share schemes.

The statistics for 2022 survey respondents show the demand for bike sharing for commuting journeys (source: [CoMoUK 2022 bike sharing statistics](#)).

- 35% used bike share for commuting at least once a week
- 16% used bike share for commuting at least three times a week
- 62% of respondents used bike sharing at least once a month for their commute

There is also a demand for other journey purposes:

- 24% of users use bike sharing at least once a week for purposes such as accessing shops, doctors and entertainment. A further 33% do so at least once a month
- 66% of users have been cycling more frequently in general, since joining a bike share scheme

In terms of the resulting modal shift, had bike share not been available, users would have otherwise made their most common trip as follows:

- 37% car (as driver, passenger, or by taxi or hire vehicle)
- 15% bus
- 9% train
- 7% underground, light rail or tram
- 4% public transport options like park and ride or employer shuttles
- 15% walk
- 10% their own bike
- 2% e-scooter

The 2021 bike share survey also reported that:

- 34% of respondents using e-bikes said that they were replacing car or taxi trips of more than 5 miles per week as opposed to 24% of non-e-bike users

Therefore there is substantial justification to include bike and ebike sharing services at primary, secondary and tertiary mobility hubs.

4.4 eScooters

e-scooters have become a common sight on streets across the UK and in many major cities and towns internationally. Whilst the UK government considers legislative updates to enable the legal use of e-scooters outside of public trials/hire arrangements, there has been considerable uptake in those areas where public hire schemes have been introduced.

Taunton and Minehead

An e-scooter trial scheme has been operational in Taunton since October 2020, with a similar scheme operational in Minehead. The scheme is operated by Zipp and, based on data up to May 2022, the scooters had:

- Provided 92,618 rides
- Covered 182,003 miles at an average trip length of 2.08 miles and an average duration of 15 minutes 37 seconds
- Travelled at an average speed of 7.98mph
- Accommodated 12,364 users and accumulated 24,114 hours of travel time

56% of the total distance travelled by the e-scooters was for trips where users stated that they would otherwise have used a car (as driver or passenger). This represents 101,922 miles saved and a CO2 reduction of 41.4 tonnes during the period October 2020 - May 2022. Looking at the number of trips, rather than distance, 15% of journeys replaced a private car trip.

It was [reported](#) in December 2022 that the trial had, at that time, provided 121,750 rides and e-scooters had travelled more than 228,500 miles. This coincided with the Department for Transport's National Evaluation of e-scooter Trials: Findings Report and Technical Report.

Comparator Schemes – UK and International

In 2022, the [West of England Combined Authority published a review](#) together with Voi outlining the findings and impacts following their 12-month e-scooter trial. The trial covered 2 areas: Bristol & South Gloucestershire and Bath.

In Bristol & South Gloucestershire, 36% of users reported that they would have used a car or taxi instead had an e-scooter not been available. Using this modal shift figure, Voi estimated that 874,000 car trips had been replaced by an e-scooter within the first 12 months of the trial.

In Bath, 29% of users reported that they would have used a car or taxi had an e-scooter not been available. Using this figure, Voi estimated that 86,000 car trips had therefore been replaced by an e-scooter during the first 12 months of this trial. However, 45% of users said that they would have walked, which is a negative modal shift. Bath is built on many steep hills, and this could be a reason why people chose to use this “easier” mode instead of walking.

Overall, they found that 44% of Voi journeys would otherwise have been walked, 6% cycled and 31% driven. Although some journeys had been shifted away from active modes, the number that had been pulled from private cars was still substantial and very positive.

The mode shift seen above had been replicated by a 2018 e-scooter trial in Portland, USA (2018 Bird e-scooter trial conducted by the Portland Bureau of Transportation (PBOT) with the results fully monitored during and after implementation. During the four-month trial, people took

700,000 trips, covering 800,000 miles, on 2,000 scooters.

- 34% of Portland riders and 48% of visitors took an e-scooter instead of driving a personal car or using Uber, Lyft, or taxi
- It was estimated that e-scooters replaced approximately 300,000 vehicle miles that would have been travelled in single occupancy vehicles and other shared vehicle trips – this corresponds to a similar emissions reduction as removing 27 average passenger vehicles from the road for a full year
- However, a third of people would otherwise have walked or cycled
- Portlanders reduced or considered reducing their car ownership due to e-scooters –6% of users reported trading in a car because of e-scooters and another 16% considered it
- E-scooters attracted new people to active transportation. 74% of local users reported having never ridden the e-scooters previously and 42% never cycling

In December 2021, a Swiss research paper (Reck, Daniel J.; Martin, Henry; Axhausen, Kay W. (2022). “Mode choice, substitution patterns and environmental impacts of shared and personal micro-mobility”. It found that privately owned e-scooters tended to replace car journeys.

The inclusion of shared eScooters should therefore be considered within mobility hubs, once and if they are legalised beyond the current authorised pilots seen in UK cities.

5.0 Mobility hubs: switch fuels

For remaining trips where a shift away from the car is not possible, there is a need to improve vehicle energy and carbon efficiency.

Whilst the mobility hub would not seek to encourage private car travel, some journeys will require the use of a car, whether that be private or shared.

For these journeys, in order to reach Net Zero targets, the switch to EVs will be critical. Hence the provision of EV car club vehicles and EV charging points for private use (and for delivery and servicing LGVs) should be considered to meet growing demand.

At the end of 2016 just 0.4% of all new vehicles registered were Battery Electric Vehicles (BEV). By 2022 this had risen to 16.6% of new car registrations. A further 6.3% of all new cars registered were plug-in hybrid EVs (PHEV), making a total market

share of 22.9% for new cars registered with a plug in 2022.

From the 2022 CoMoUK car club report, 14% of car club vehicles in the UK are now electric, with a further 20% being a form of hybrid. 42% of survey respondents had used a full electric car club vehicle, and 91% of those users stated they were very satisfied with driving the electric car club vehicles.

These numbers reflect a year-on-year increase in demand for electric vehicles and therefore justify the inclusion of charging points at selected mobility hubs, which also adheres to the UK Government's aim for 300,000 electric vehicle charging points to be available on the network by 2030 ([source: UK Government](#)). In addition, this gives access to EV charge points to those without off-street parking, and provides the opportunity to charge within the local neighbourhood. This is an important service provision, as not everyone has a driveway or the capability to charge a vehicle at home. This could

provide a positive influencing factor to those otherwise unwilling to shift to EV.

This could also provide a further beneficial relationship between the EV charging facilities provided and the non-mobility features of larger mobility hubs. Whilst waiting for the battery to charge, users might make use of the café or co-working facilities.

Consideration could also be given to incorporating renewable electricity sources - such as solar PV - into the design of the hub rooves, supported by on site battery storage.

The provision of electric charging services at primary mobility hubs can also extend to electric DDRT (e.g. MK Connect, Milton Keynes) and e-bus services, which would further enhance the sustainability and carbon reduction in the surrounding area.

6.0 Cumulative uptake of shared modes

The potential uptake of shared mobility services can be exponentially increased by locating multiple modes in one location, along with traditional public transport options. This is an important rationale behind the mobility hub design.

Car club users tend to be more likely to use a variety of other sustainable modes.

In the CoMoUK 2021 survey, 61% of car club members reported having used public transport at least once a week, compared to a national average of only 19% (source: CoMoUK Car Club Report 2021). In London, 75% of car club members had used public transport.

Therefore by offering car clubs and bus services at a mobility hub, this should have an cumulative uptake of both modes.

Car club users are also much more likely to use a bicycle:

- 37% of car club users reported having used a bicycle once a week, compared to a national average of 20% (source: CoMoUK Car Club Report 2021)
- In 2020, 30% of car club members reported using a bicycle three times per week (source: CoMoUK Car Club Report 2020)
- 55% use a bike to get to work compared to 27% in the control group, non-car club users (source: [Analysis of the impacts of car sharing in Bremen, Germany](#))
- 39% use a bike to shop compared to 23% in the control group, non-car club users (source: Analysis of the impacts of car sharing in Bremen, Germany)
- In London, 36% of car club members reported having used a bicycle at least once a week (source: CoMoUK Car Club Report 2021)

[CoMoUK 2022 bike sharing statistics](#) also show bike share users are more likely to take multimodal journeys:

- 54% of users use bike share at least once a month to access public transport.
- 64% of users combine bike share with other modes of transport, mainly with bus and rail.
- 23% stated that they combine their most common bike share trip with a bus
- 22% with a train
- 10% with underground, tram or light rail
- 4% reported combining their most common bike share trip with the use of an e-scooter
- 13% reported combining bike share trips with taxis
- 13% reported combining it with car driving, and
- 6% combined it with being a car passenger.

Therefore, a cumulative uptake in cycling can be expected by co-locating such shared services with public transport and car clubs.

Escooter riders also show a greater tendency for multi-modal journeys, with 34% (San Francisco Municipal Transportation Agency (SFMTA) e-scooter pilot mid-point evaluation, and 15% ([2019 6-T Bureau de Recherche in Paris, Marseille, and Lyon user survey](#)), reporting that their most recent trip was multi-modal to or from public transit. Lime scooter data also shows a consistent story to the research above with 30% of riders replacing a car trip and 27% connecting with public transport in urban areas (source: [Forbes](#)). This shows the importance of including e-scooters in all levels of mobility hub to bridge the gaps in the wider public transport network.

Technology can also reduce barriers to entry towards new or previously unused modes. By having access to all modes at a mobility hub through the same smart phone app, for example, this is likely to encourage users to try out the other modes available, such as e-bikes and scooters, even if they have never used them before.

This would be further supported by having concierge/support services at the hub that can directly support users.

In addition, primary mobility hubs can provide services such as concierge assistance, which can help encourage people to try out new modes, and overcome wariness or concerns which is likely to help initiate and maintain new travel behaviour.

Overall, therefore, there is much data which indicates that the co-location of all such services within mobility hubs is likely to have exponential uptake of the component modes and lead to long-term changes in behaviour. This can be maximised through mobile phone applications to increase convenience and act as a medium through which incentives can be offered.



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