

Canterbury District Biodiversity Plan

A nature recovery strategy

October 2026

Foreword

The Canterbury Biodiversity Plan is a document for all of us. Whether you are a farmer, business owner, developer, community group, or resident, this document has been created to bring us together as we strive to protect and enhance biodiversity across the district.

The plan aims to raise awareness, inspire action, and unite communities. In turn, it will build stronger, better-connected ecosystems that are more resilient to the challenges of the biodiversity and climate change crisis. I love living here. We are all extremely lucky to have such a variety of wildlife in the Canterbury district, from our coastlines and marshes to our chalk streams and woodlands; there is truly something for everyone to enjoy.

Protecting these natural assets for the future is an urgent priority for the council, our partners, and the entire community. Therefore, this strategy acts as a call to action for anyone reading to get involved and support our attempts to enhance biodiversity, whether in your front garden or on a landscape scale!

During the formulation of this strategy, we consulted extensively with residents, the council's Biodiversity Group, councillors from all political parties, and external partners. We updated the action plan to directly reflect their feedback. As a result, we have provided greater clarity on issues such as funding, established a stronger focus on

monitoring delivery of the action plan, and introduced new educational initiatives. We also took on board feedback regarding how this strategy aligns with Local Plan and development goals.

As a council, we recognise the inherent dichotomy in our responsibilities. Because we act as the local planning authority, we must constantly balance the statutory duty to deliver housing and infrastructure through our Local Plan allocations with our commitment to protecting the natural environment.

These two priorities do not always align, particularly when development decisions intersect with environmental concerns. While this strategy cannot remove those competing pressures, it provides a clear and transparent framework.

To build a resilient natural environment, we too must be adaptable to a changing climate and emerging ecological threats. Therefore, the Canterbury Biodiversity Plan does not rigidly prescribe actions that may become unsuitable in ten years' time. Instead, it has been carefully crafted to deliver tangible, immediate outcomes for biodiversity while retaining the flexibility to grow and reshape itself against future challenges.

Six core principles form the foundation of this strategy, helping to build a framework for decision-making. These have been developed alongside key stakeholders, including the Kent Wildlife Trust, the Royal Society for the Protection of Birds (RSPB), and the Canterbury Open Space and Biodiversity Group (OSBG). Accordingly, one of these core principles focuses entirely on partnership working. This reflects the reality that delivering this strategy is a collective responsibility, not the duty of a single organisation alone.

This strategy was developed in response to the Biodiversity Emergency declaration made by the council in 2023, and it will act as a supporting document to the new Local Plan. It also links directly to the Kent Local Nature Recovery Strategy to connect natural habitats, aligning with Lawton's Nature Principles: 'more, bigger, better, and joined up'. Furthermore, the council has a statutory obligation to demonstrate we are meeting our Biodiversity Duty under the Environment Act 2021. This document represents a considerable step toward fulfilling that duty.

Councillor Mel Dawkins
Councillor for St Stephens
Cabinet member for
Environment and Sustainability



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Part 1: A shared vision for nature's recovery



The vision

By 2042/43¹, nature will thrive across Canterbury district's land, rivers, wetlands and coast. A strong, connected network of nature-rich places will support species recovery, help habitats expand, and build resilience to climate change. Nature recovery will be embedded in every part of Canterbury City Council's work with the land it manages playing a clear role in restoring biodiversity. Residents, businesses, schools, partners, communities and developers will all be active champions of this strategy — working together to restore nature now and for future generations.



A nature network across the Canterbury district

This is a map to visualise landscape-scale nature recovery in the Canterbury district. It shows seven key landscapes and their flagship species forming our ideal nature recovery network.

Legend

Woodland and Tree Super Corridor

Vision: A hyper-connected network of structurally diverse, ecologically dynamic woodlands (at core), traditional orchards, wood pasture parkland and wilder hedgerows. Connects to Wilder Coast and Stour Valley biodiversity recovery zones.

Wilder coast and Marshlands

Vision: A hydrologically and ecologically connected, dynamic network of intertidal mudflats, saltmarsh, brackish and freshwater marshes and coastal floodplain grazing marshes that is resilient to climate change and sea level rise.

Stour Valley Nature Corridor

Vision: A continuous corridor or riverine and riparian habitats, including we woodland, wet meadows, damp scrub habitat, reedbeds and marshes. Dynamic natural processes are encourage and prioritised, with herbivores, beavers and the Stour itself exerting their influence, often blurring and blending the boundaries between land and water.

Biodiverse Downlands

Vision: A rich tapestry of open downland, scrub-grassland mosaics, woodland copses and belts, traditional orchards, chalk streams and wilder hedgerows. Low intensity herbivore movements drive economical dynamism and a shifting patchwork of habitats across large areas.

Wilder Whitstable, Wilder Herne Bay and Wilder Canterbury City

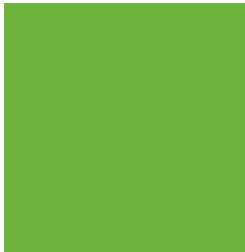
Vision: Urban green spaces with diverse, abundant communities or birds, butterflies and other invertebrates. Allotments and wild corners, ponds and thriving populations of reptiles, amphibians, birds and pollinators. New housing schemes that provide homes and habitat for Swifts, Starlings, Hedgehogs, Slow Worms and a host of other species. Habitat corridors that weave their way through streets and parks. Biodiverse roofs and pollinator-focussed urban planting schemes that boost bee and butterfly populations. Wild road and rail verges that teem with wildflowers and insects.

Connectivity Target Areas

Creation and enhancement of habitats to further improve connectivity between biodiversity improvement zones.



Flagship habitats and species of Canterbury district



Broadleaved deciduous woodland



Meadows



Chalk grassland



Heathland



Acid grassland



Coastal and floodplain grazing marsh



Reedbeds



Scrub



Hedgerows



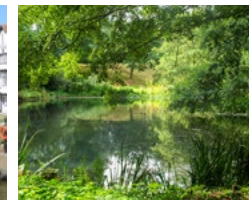
Maritime cliffs



Mudflats



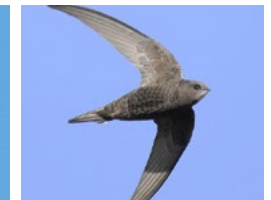
Chalk rivers and streams



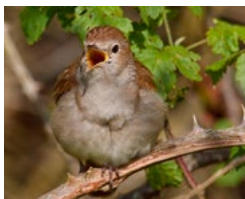
Ponds



Turtle dove



Swift



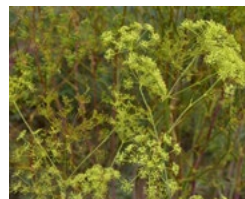
Nightingale



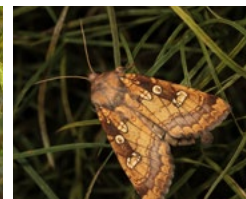
Redshank



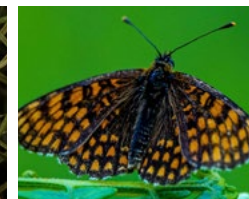
Lapwing



Hog's Fennel



Fishers Estuarine Moth



Heath Fritillary



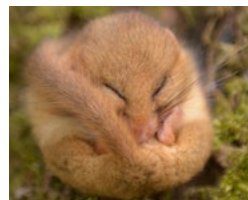
Beaver



Green Winged Orchid



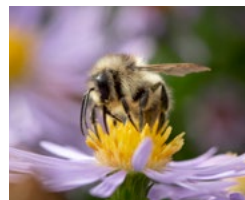
Eelgrass



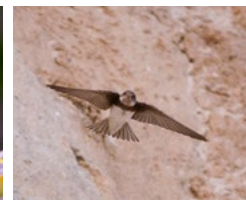
Dormouse



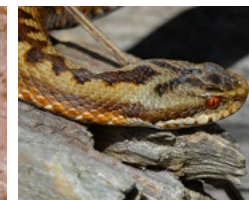
Water Vole



Shrill Carder Bee



Sand Martin



Reptiles and Amphibians



Skylark



Seven principles underpin this strategy

Prioritisation

To maximise resources, Canterbury City Council is focusing on three of the Nature Recovery Strategy's seven key landscapes: The Blean, Stodmarsh and the Wantsum Channel. The remaining landscapes are still important and will benefit from the actions set out in this strategy, but prioritising these three areas will help create the ecological critical mass needed to deliver meaningful nature recovery.

Urgency

The council's Biodiversity Emergency Declaration in 2023 recognised that human activities are leading to the extinction of animal and plant species at an alarming rate, with scientists predicting a mass extinction driven by human activity. There is an urgent need to act. The changes required will take many years, so we must start now.

Futureproofing

The catastrophic loss of biodiversity and the accelerating pace of climate change are interconnected, with significant overlaps between the causes and consequences of both crises. This strategy will ensure that the Council's actions to tackle biodiversity loss and climate change are developed and implemented in a complementary and coherent way.

Leadership

The district is privileged to have exceptional wildlife habitats, but this also gives us all a responsibility to manage and protect them. The Council's legal responsibilities, and its role as a local planning authority and major landowner, mean it is uniquely placed to lead nature recovery action across the district.

Partnership

The council cannot address these issues single-handedly. The causes of biodiversity loss are complex, and the actions needed are numerous and wide-ranging. Tackling this crisis requires the support and buy-in of many stakeholders. The Council will therefore work with a broad range of partners to address the biodiversity crisis. This Biodiversity Plan has been developed in close consultation with stakeholders and partners, who will continue to play a central role in its monitoring and implementation.

Working at scale and being proactive

Actions must focus on identifying opportunities to expand and connect existing nature-rich areas and deliver practical change on the ground. This will not happen by itself; it requires forward-thinking, long-term commitment and proactive collaboration between a range of stakeholders.

Responsiveness

As referenced under urgency, the threats facing the natural environment are increasing at an accelerating pace. This strategy must be responsive, with actions that are adaptable enough to respond to change. The strategy will be reviewed regularly to monitor progress and adapt the actions to changing evidence, threats and opportunities.

Our actions

The actions to be taken forward have been developed with partners through the Open Space and Biodiversity Group and reflect the actions first identified following the declaration of a Biodiversity Emergency. To ensure credibility, the actions reflect available resources, including people and funding, and, where appropriate, focus on adding value to the extensive partnership work already under way. The actions will be monitored annually to reflect changes in available resources.

There are 31 actions that will help deliver the ambition of this strategy. They have been grouped into six areas:

- **Strategic policy working** – embedding biodiversity into Canterbury City Council’s strategies and policies.
- **Partnership working** – implementing the strategy with partners both within and outside the council, as it cannot be delivered by the Environment team alone.
- **Delivery** – identifying the additional resources and delivery mechanisms required to implement the strategy.
- **Community working** – supporting everyone to take action that improves biodiversity.

- **Funding** – identifying the funding streams that will be sought to deliver this strategy. The action plan will develop as new funding sources become available.
- **Audit and planning** – tracking work streams while implementing policy and adapting it for the future.

Additional notes

The actions are listed below. Those that are relevant are also included in the subsequent chapters for each habitat.

Each action includes a set of KMLNRS references. This is not an exhaustive list of the measures that relate to each action; instead, it indicates the objectives that the action seeks to deliver. A full list of KMLNRS potential and wider measures can be found in Appendix 4.

Where an action’s term is not labelled ‘ongoing’, short, medium and long term refer respectively to one to three years, four to eight years, and eight years or more.

Where s.106 funding is shown, marked with an asterisk (*), this is subject to confirmation.

	Action	Lead and partners	Term	Estimated cost and source
Strategic policy working				
BA1	Reflecting the Declaration of a Biodiversity Emergency in the Corporate Plan the council will seek to transfer the value and importance placed on our local biodiversity, for its intrinsic value, as well as the public benefits it delivers across the district and across services, into future versions of the council (LGR).	- Senior Environment Manager - OSBG	Short	N/A ²
BA2	Following their adoption, ensure the delivery of Regulation 19 Draft Local Plan policies DS25 (securing Biodiversity Net Gain at 20%) and DS27 (The Blean Woodlands complex). KMLNRS action ref: CON 2.1, LM 1.1, LM 4.1, WTH 1.1, WTH 1.2, WTH 2.1, WTH 2.2, WTH 4.2, WTH 4.4, WTH 5.4	- Senior Environment Manager - Planning Policy Team - OSBG - Wilder Blean Steering Group	Medium	N/A
BA3	Undertake a strategic review of landowners' and farmers' willingness to deliver biodiversity actions and present results in the form of a "Willingness Map." KMLNRS action ref: LM1.1	- Senior Environment Manager - OSBG - Kent and Medway Local Nature Recovery Strategy (LNRS)	Medium	N/A
BA4	Maintain and report on the continued delivery of the Pollinator Action Plan, Tree and Woodlands Strategy, Open Space Strategy, and the Green Infrastructure Strategies. KMLNRS action ref: LM 4.1, URB 2.1	- Senior Environment Manager - Planning Policy Team - OSBG	Short	N/A
Partnership working				
BA5	Support the council and Kent Downs National Landscape's duty to 'further' the aims of the National Landscape. KMLNRS ref: GL1.1, GL1.2, GL1.3, GL 5.1, GL 5.2	Senior Environment Manager	Short	CCC £5,000 p.a.
BA6	Work with the Wilder Blean Partnership (RSPB, KWT, FC, CCC and WT) to address habitat fragmentation and nature recovery through the delivery of 10 key schemes over the next five years. KMLNRS ref: WTH 1.1, WTH 2.4, WTH 2.1, WTH 2.2, WTH 2.5, WTH 4.1, WTH 4.2, WTH 4.3, WTH 5.1, WTH 5.2, WTH 6.1	- Senior Environment Manager - OSBG - Wilder Blean Group	Medium	N/A

	Action	Lead and partners	Term	Estimated cost and source
BA7	Work in partnership to deliver the Stour Valley Restore initiative, promote biodiversity opportunities along the Great River Stour at Wincheap Meadows, Bingley Island and Fordwich Meadows, and explore the Broad Oak Reservoir biodiversity gain and the establishment of a Great Stour Regional Park. KMLNRS action ref: FW 1.2, FW 3.2, FW 2.4, FW 3.3, FW 4.1, FW 4.2, FW 5.2, FW 7.1, FW 7.2, FW 9, LM4.1, LM 3.1	- Senior Environment Manager - OSBG	Medium	External - £1.5m S.106 - £50,000*
BA8	Support partnership opportunities for landscape-scale works within the Wantsum Channel, connections to The Blean and Pegwell Bay E3 initiative, the Forest of Kent initiative, and Canterbury to Coast. KMLNRS action ref: FW 9.1, LM 2.1, LM 3.1, CL 2.4	- Senior Environment Manager - OSBG - Forest of Kent Group	Medium	External - £15,000-50,000
BA9	Partner with Foreshore Services and the Zoological Society of London (ZSL) on the development and delivery of coastal and marine biodiversity projects, including Eel Grass meadow restoration at Seasalter, investigating the provision of artificial high tide roosts at Long Rock, and the placing of artificial micro reefs within the intertidal areas of Herne Bay. KMLNRS action ref: CL 1.4, CL 2.2, CL 2.3, CL 2.4, CL 3.2, CL 5.2	- Senior Environment Manager / Foreshore Manager - OSBG - ZSL	Medium	External - £25,000
BA10	Liaise with Highways England and other highway authorities to promote the management of the transport network, walking and cycling and public rights of way for habitat conservation, including the opportunity for green bridges. KMLNRS action ref: CON 3.2, CON 3.3, CON 2.1	- Senior Environment Manager - OSBG - CCC Transport - Statutory consultees	Medium	N/A
BA11	In association with the Rights of Rivers initiative, develop initiatives promoting the improved condition of the district's waterways and ensuring nutrient neutrality, including working with Natural England to support their restoration of Stodmarsh. KMLNRS action ref: FW 3.2, FW 4.1	- Senior Environment Manager / Foreshore Manager - OSBG - Statutory consultees	Medium	External (Nature Restoration Fund)

	Action	Lead and partners	Term	Estimated cost and source
Delivery				
BA12	Promote the delivery of the 20 km long Canterbury Hedge and other tree planting initiatives across the district – seeking to plant and manage a minimum of 3 km of hedgerow in the next five years. KMLNRS action ref: WTH 1.3, WTH 2.1, WTH 2.3, WTH 2.4, WTH 2.5, WTH 5.4, WTH 8.1, WTH 8.3, URB 2.3	Senior Environment Manager	Short	CCC - £17,500 (Y1 and Y2)
BA13	Support biodiversity and community outputs delivered by the Kentish Stour Countryside Partnership (KSCP) by funding a minimum of 12 volunteer task days on council owned sites and increasing KSCP's support / training for the district's Friends of Groups. KMLNRS action ref: LM 4.1, GL 3.1, GL 4.1, WTH 2.5, SH 2.3, WTH 6.2, FW 4.1, URB 2.1	Senior Environment Manager	Short	CCC - £5,000 p.a.
BA14	Utilise the KMLNRS to identify and promote positive land management and the delivery of biodiversity outcomes at key landscapes and sites such as The Blean complex, Seasalter, the Wantsum Channel, Old Park, and Larkey Valley Woods. KMLNRS action ref: GL 2.2, 4.1, SH 2.1, SH 2.2, SH 2.3, WTH 1.1, WTH 5.1, WTH 5.2, FW 9.1, URB 2.1	- Senior Environment Manager - OSBG - Friends of Old Park & Chequers Wood	Short	CCC – tbc s.106 – tbc* CIL - tbc
BA15	Grant aid the delivery of biodiversity projects to a maximum of £15,000 per annum – to further community local measures for nature recovery. KMLNRS action ref: LM 4.1, URB 2.1	- Senior Environment Manager - OSBG	Ongoing	CCC - £15,000 p.a.
BA16	Put measures in place to establish Wraik Hill and Old Park as BNG Land Banks, with associated 30 years conservation covenants / funding. KMLNRS action ref: LM 4.1, GL 4.1, GL 3.1, GL 3.2, SH 2.1, SH 2.2, SH 2.3, WTH 1.1, WTH 5.1	- Senior Environment Manager - OSBG	Short to medium	CCC - £25,000 (Y1 and Y2)

	Action	Lead and partners	Term	Estimated cost and source
BA17	Support Contracts and CANENCO's delivery of biodiversity positive grounds maintenance through provision of training and increased awareness. KMLNRS action ref: LM 4.1, WTH 2.5, URB 1.1, URB 1.2, URB 2.1	- Senior Environment Manager - Contracts manager - Canenco manager - OSBG	Short to medium	N/A
BA18	Referencing measures in the KMLNRS, scope and communicate landscape scale strategic opportunities across the district for habitat creation / defragmentation through natural regeneration. KMLNRS action ref: GL 1.2, GL 2.2, GL 3.2, WTH 1.2, WTH 2.1, FW 4.1	Senior Environment Manager	Ongoing	External - £5m s.106 - £0.5m*
Community working				
BA19	Targeting schools, universities and parish councils to promote applications to the CCC Biodiversity Grants and manage biodiversity initiatives. KMLNRS action ref: LM 4.1, URB 1.1, URB 2.1	- Senior Environment Manager - OSBG	Medium	N/A
BA20	Work with the Canterbury Riverside Group to deliver the Canterbury Riverside Strategy. KMLNRS action ref: FW 4.1, LM 4.1, URB 2.1	- Senior Environment Manager - OSBG	Ongoing	s.106 - £100,000* External - £100,000
BA21	Continue to support and advise Friends of Groups across the district and establish new groups where there is demonstrable need and/or demand. KMLNRS action ref: LM 4.1, URB 2.1	- Senior Environment Manager - OSBG	Ongoing	N/A
BA22	Engage with the Canterbury district biodiversity network to reach wider communities, schools and university, giving an annual update on key biodiversity actions and the delivery of the biodiversity plan. KMLNRS action ref: LM 4.1	- Senior Environment Manager - CDBN	Ongoing	N/A

	Action	Lead and partners	Term	Estimated cost and source
Funding				
BA23	Work with partners on the development and utilization of Nature Investment Zones to deliver the local and strategic actions of this and related strategies. KMLNRS action ref: LM 4.1	- Senior Environment Manager - Climate Change Principal Policy Officer	Short	CCC - £30,000 p.a.
BA24	Provide support, where requested, to Neighbourhood Planning Groups or Parish Councils undertaking Neighbourhood Plans, about the inclusion of recovery measures. KMLNRS action ref: LM 4.1	Key Strategy Group	Short	N/A
BA25	Consider potential for partnership led external funding strategies for key initiatives/sites including: (a) Old Park and Chequers Wood, (b) The Wantsum initiative, and c) Seasalter Levels. KMLNRS action ref: GL 2.2, GL 4.1, SH 2.1, SH 2.2, SH 2.3, WTH 1.1, WTH 5.1, FW 9.1, CL 2.4	- Senior Environment Manager - OSBG	Short - medium	N/A
Audit and planning				
BA26	Review the management of land owned by the council, the universities, schools, Housing Revenue Account, MoD, and hospitals, and promote biodiversity measures such as pollinators. KMLNRS action ref: LM 4.1, URB 2.1, URB 2.3, URB 3.2, WTH 2.4, CON 3.2	- Senior Environment Manager - Climate Change Principal Policy Officer - OSBG	Short (assess), Medium (delivery)	N/A
BA27	Undertake annual audit of the biodiversity plan's delivery through representation to the OSBG, Overview Committee, Biodiversity duty reporting, and produce annual report. KMLNRS action ref: LM 4.1	- Senior Environment Manager - OSBG	Short	N/A

	Action	Lead and partners	Term	Estimated cost and source
BA28	Review provision of Local Nature Reserves in relation to growing population. Complete audit and then prioritise action. Consider focusing on unprotected chalk grassland. KMLNRS action ref: GL 1.1	- Senior Environment Manager - OSBG	Short	N/A
BA29	Enable the enforcement of best practice tree planting and maintenance on all development sites. KMLNRS action ref: WTH 2.5, WTH 5.4, WTH 2.3, URB 1.2, URB 2.1, URB 2.3, URB 3.1, CON 2.3	- Senior Environment Manager - OSBG	Medium	N/a
BA30	Reference KMLNRS in the provision of SuDS and semi natural open space, and delivery of 20% canopy cover and 20% BNG, making maximum use of the opportunity to strengthen habitat connectivity in pre-application and planning decisions. KMLNRS action ref: FW 2.4, URB 2.1, URB 2.3, URB 2.5, URB 3.1, WTH 2.3, WTH 2.5, WTH 5.2	- Senior Environment Manager - OSBG - Statutory consultees	Ongoing	N/A
BA31	Consider adaptive measures (species selection, land management / use etc.) to mitigate against the impacts of climate change and embark on initiatives to achieve Wilder Canterbury City, Wilder Whitstable and Wilder Herne Bay. KMLNRS action ref: LM 4.1, WTH 2.5, FW 2.5, FW 3.3, URB 1.1, URB 1.2, URB 1.3, URB 2.1, URB 2.2, URB 2.3, URB 3.1, URB 3.4	- Senior Environment Manager - Climate Change Principal Policy Officer	Medium	N/A

Implementation

Delivering the strategy’s vision will require the efforts of many individuals and organisations. While Canterbury City Council can commit to delivering the actions, fully realising the strategy’s ambition will require partners, local communities, landowners, schools and colleges, businesses, residents and others to set ambitious targets, work together and take action.

Lead	
Canterbury City Council will be leading the way by example and will be ambitious in delivering this Biodiversity Plan. The Council will have embedded biodiversity restoration and enhancement into all its operations and into its decision-making. The land it holds will be in a better condition for nature. It will be an advocate for nature in the district, encouraging everyone to play their part in delivering this strategy. The Council will bring partners and communities together to work towards our common vision for nature recovery and will ensure biodiversity is protected in council policy, including the Local Plan. It will also seek funding to deliver this strategy.	
Agency based	Community based
Developers will ensure that their development enhances nature, delivering the priorities of this strategy and Biodiversity Net Gain of 20%. They will be ambitious in their plans for nature, proposing and ensuring that nature recovery is considered in all greenspaces in the development through the provision of a range of wildlife habitats . Additional features such as bird boxes, swift boxes and hedgehog highways will contribute to nature recovery. They will recognise the importance of access to nature in their developments and will be ensuring where possible that residents enjoy the benefits of being close to nature.	Communities will be joining people together to enhance their local nature. They will understand the priorities near to them and they will have developed and implemented local projects, with more being planned. They will have enthusiasm for what can be achieved and will be enjoying the results of successful nature recovery. They will be better connected to nature and will be seeking to carry out nature surveys to understand local nature and wildlife and setting up community groups in their area.
Landowners and land managers will understand the part their land can play in helping deliver local nature recovery and what actions they can take to improve biodiversity. Landowners will have already come forward to develop positive enhancement projects and these will be underway. These will showcase what can be achieved, inspiring other landowners to do likewise. Specifically, they may enter agri-environment schemes to increase biodiversity, work to support species like farmland birds, join up hedgerows, and manage and restore existing habitats.	Residents will understand and appreciate the nature of the district and what needs to be done to restore it. They will be excited by the possibilities for restoring and enhancing nature and will appreciate improved health and mental wellbeing through being able to access the natural world. They will be taking action to improve nature in their own gardens and through volunteering.

Agency based	Community based
Partners, such as the Kent Wildlife Trust, RSPB, Woodland Trust, the Kent Downs National Landscape, Forestry Commission and others, will develop innovative and ambitious projects for nature recovery. They will be working together and with Canterbury City Council to build on their successes. Even more bold plans will be developed. New partners, seeing the success of the initiatives, will be inspired to act.	Universities, colleges and schools will actively engage in promoting biodiversity on their own land, will carry out research and will provide educational opportunities to increase understanding and appreciation of local wildlife and the natural environment. Schools can help deliver biodiversity by planting trees in school grounds, taking children to experience nature, improving school grounds for nature, and conducting environmental education activities.
Parish Councils will develop local action plans and projects for biodiversity to increase it in their parishes. They could consider how to include Biodiversity in their Neighbourhood Plan. They can bring local communities together to improve biodiversity and also seek funding for biodiversity projects.	Businesses will understand how they can contribute to nature recovery and will be acting and seeking opportunities – through funding and sponsoring local biodiversity projects, supporting employees to take action and volunteer, enhancing nature on their premises and sourcing sustainable products.

Monitoring and reporting

The CCC Environment team will review this action plan regularly and track its progress. Biannual reports will be submitted to the CCC Open Space and Biodiversity Group, enabling key councillors and stakeholders involved in the district's biodiversity work to scrutinise progress.

In addition, reflecting Local Government Review and the establishment of the new East Kent Unitary, the strategy will be reviewed and updated in 2030.

The Environment Act 2021 places a legal duty on local planning authorities to conserve and enhance biodiversity across all their functions, from land management to planning. To demonstrate compliance with this duty, Canterbury City Council has submitted two biodiversity duty reports to Defra. The next report is due in 2031. Evidence of the delivery of this strategy and other related strategies will play a key role in that report.

Other CCC reporting mechanisms can also be used to monitor progress against this strategy's action plan. These could include adding a Biodiversity Assessment to the Climate Change Impact Assessment that accompanies committee reports. This will enable councillors to take biodiversity impacts into account when considering reports, in line with the council's broader climate change emergency declaration.



Part 2: About this strategy



Kingsmead Playing Field

The need for this strategy

According to the Natural History Museum's Biodiversity Intactness Index, things are not going well for biodiversity with the UK being ranked the 189th most nature depleted country of 240 global territories. England retains only 47% of its original biodiversity. The Index's suggested safe level is 90%.

Alongside our neighbouring local authorities, Canterbury district is fighting back. Our natural world is under pressure as never before. There is a need to take urgent action to halt the decline and to restore biodiversity, and with a changing climate, the pressure is only going to intensify.

Reflecting on the issues set out above, the catalyst for this strategy was Canterbury City Council's unanimous adoption of a Biodiversity Emergency Declaration on 19 October 2023. This followed the Council's Climate Change Emergency Declaration in July 2019. There is both a need and an opportunity to address the biodiversity and climate crises together, and the Council is committed to helping lead nature recovery across the district.

The State of Nature in Kent report (2021) showed that nature is under increasing pressure and that a range of factors is driving historic and continuing decline. These include the intensification of farming, direct habitat loss from development and infrastructure, pollution, a decline in land management for nature, and the impact of invasive non-native species. The remaining areas of habitat are often small and isolated, making them vulnerable and limiting the ability of species to move between them.

In response to these pressures in Kent, the report recommends that councils adopt a 20% Biodiversity Net Gain (BNG) requirement, above the Government's mandatory 10% requirement.

Legislative changes have also strengthened the case for this strategy. The Environment Act 2021 requires the Council to protect and enhance nature, and to report on the action it takes. It also introduced new responsibilities for councils, including Biodiversity Net Gain (BNG), which became mandatory for some new developments in 2024. BNG requires qualifying developments to leave biodiversity in a measurably better state than before. Given the historic decline in biodiversity across the district, reversing this decline quickly is critical.

The Biodiversity Emergency Declaration recognises this urgency and calls for action. Reflecting the pressures identified in the State of Nature in Kent report, the aims of this strategy, and related council strategies such as the Green Infrastructure Strategy and Pollinator Action Plan, Canterbury City Council is adopting a 20% net gain requirement for new developments in the district through its new Local Plan.

This strategy sets out the range of biodiversity found in Canterbury district and identifies the action needed to protect it and support nature recovery. It will guide key areas of the Council's work and decision-making, provide supporting evidence for the District Local Plan, and complement the Kent and Medway Local Nature Recovery Strategy (KMLNRS).

Kent and Medway local nature recovery

The Kent and Medway Local Nature Recovery Strategy (LNRS), launched in November 2025, sets out five purposes:

- An agreed set of ambitious priorities for nature recovery.
- Practical and deliverable measures to support those priorities.
- A spatial strategy that identifies what action is needed and where it should be focused, so action is directed to where it will deliver the greatest benefits.
- A shared vision for nature recovery and the use of nature-based solutions across Kent and Medway.
- A framework for joined-up action, developed with those who will be central to its delivery.

Canterbury district's nature recovery vision and actions have been informed by the KMLNRS. Plan 5a in this strategy shows the close alignment between the district's nature recovery vision and the KMLNRS Areas that Could Become of Particular Importance for Biodiversity (ACIB).

The Council cannot achieve nature recovery in the district alone, as many of the pressures affecting nature are outside its control. This strategy will act as a catalyst for action across the district, involving residents, communities, landowners, businesses and partners. It identifies local actions that the Council, its partners and local stakeholders can take to support nature recovery at district level.



Kent and Medway Local Nature Recovery Strategy

Making space for the county's nature

What is nature recovery?

Across the UK, action to promote nature recovery is increasing rapidly. Key drivers include the UK's commitment to the global '30 by 30' ambition, which aims to protect 30% of land and sea for nature by 2030, and the requirement to prepare and publish local nature recovery strategies at county level.

The independent review of England's wildlife sites and ecological network, Making Space for Nature ('The Lawton Review', 2010), led by Sir John Lawton, concluded that biodiversity habitats do not form a coherent, resilient ecological network capable of responding to climate change and other pressures.

It is not enough to preserve nature in small, isolated sites and call them 'nature reserves'. Wildlife populations need to increase, and species then need to be able to move across the landscape. For this to happen, a local nature recovery network needs to be planned and delivered – a series of connected spaces, like the Woodland and Tree Super Corridor and Wilder Coast and Marshlands, are needed. The 'Areas that Could Become of Importance for Biodiversity' map and associated Measures demonstrates where and how this landscape can be created and maintained. We need to plan at a strategic level and deliver at both the strategic and local levels.

This was summarised by the Lawton Review as: 'More, bigger, better and joined'. The goals of 'more, bigger, better and joined' form the foundation of Canterbury District's Biodiversity Plan as well as the Kent and Medway Local Nature Recovery Strategy.

Creating a local nature recovery network needs planning at a strategic scale and delivery at both a local and strategic level.

The actions need to address five areas:

Creation of new sites – New habitats will need to be created – to extend sites, to link sites or to create wildlife corridors.

Increase the **size** of current wildlife sites ensuring they are better able to hold meta populations and be able to withstand local pressures and change in management.

Improve the **quality** of sites which already support nature through managing them better for nature. The core network of protected biodiversity sites must be in a good condition as these are the reservoirs from which nature can spread. E.g. The Blean for Heath Fritillary butterfly, Seasalter for breeding waders and the Great Stour for beaver and water voles.

Connections across the landscape. Improve the connections between sites by creating corridors or 'stepping stones' of habitats and areas. These will help nature move between sites and expand their range by populating new areas.

Reduce the pressures on key wildlife sites by improving the wider environment. This includes buffering wildlife sites, which means making sure that the areas around wildlife sites are managed to help to protect them and to increase biodiversity.

How this strategy has been developed

Creating this strategy has been a collaborative process. It has been guided by the Canterbury Open Spaces and Biodiversity Working Group (OSBG) which includes elected Canterbury City Council members along with the Kent Wildlife Trust and the RSPB.

Our vision for nature recovery across the district is shown on page 6. To develop this vision, a range of evidence was reviewed and combined with local knowledge.

Natural England Priority Habitat Inventory data and Natural England Habitat Network mapping has been reviewed. This is important data which the council needs to have to ensure it is fulfilling its legally required biodiversity duty.³ The Kent Habitat Survey (2012) has also been reviewed to highlight habitat areas which aren't included in the Natural England Priority Habitat Inventory. Final outputs from the Kent and Medway Local Nature Recovery Strategy have also been reviewed and reflected in the document.

The areas that could become of particular importance for biodiversity in the Canterbury district are shown in Plan 5a on page 32.

Other Canterbury City Council strategies have also informed this strategy and been referenced in it. Shared objectives across these strategies are shown in Appendix 1.

A draft of this strategy was consulted on between February and May 2026. CCC officers promoted the consultation through a press release, social media, emails and three public meetings. This public engagement sought views on biodiversity priorities in Canterbury district and tested the vision and actions set out in the document. A total of 81 online responses and 20 written representations were received, with most respondents already actively engaged in biodiversity.

Overall, the vision and actions received broad support, although respondents highlighted gaps and opportunities for improvement, particularly around monitoring and enforcement. There was also concern that greater volunteer and community engagement was needed.

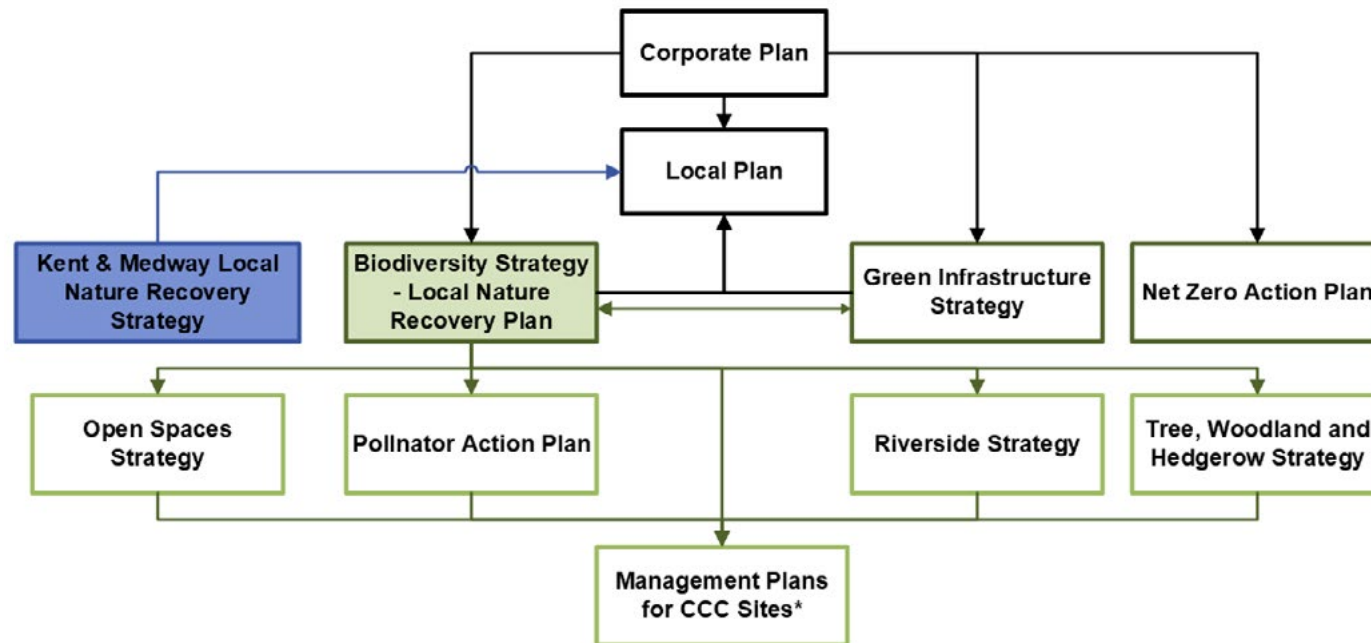
CCC officers shared and discussed the responses with the Open Space and Biodiversity Group (OSBG), before reflecting the comments in the strategy through further edits and amendments.

Following Cabinet's approval, adoption of the strategy will establish a local nature recovery strategy for Canterbury district from October 2026 onwards.

Strategic context (biodiversity)

Canterbury's Biodiversity Plan is an important strategic document for the council. It supports delivery of the council's Corporate Plan 2024–28, particularly the Greener priority, and contributes to the Sustainable Development Goals (SDGs), including SDG 11: Sustainable Cities and Communities; SDG 13: Climate Action; SDG 14: Life Below Water; and SDG 15: Life on Land. It also provides evidence for the Local Plan and sits alongside the Green Infrastructure Strategy, with which it shares objectives.

Several strategies sit below the Biodiversity Plan and help deliver its shared objectives, additional actions and overall ambition. Appendix 1 shows the shared objectives and explains how each of the main strategies contributes to delivering them.



These bottom strategies and management plans deliver and provide more detail on strategies above them in the hierarchy. There are cross-linkages between them and shared objectives. See Appendix.

Part 3: An overview of Canterbury district



The landscapes of Canterbury district⁴

From the coast in the north, through the extensive woodland of The Blean, through the river valley of the River Stour to the downlands of the south to the Wantsum Channel in the east - the landscapes of Canterbury are diverse. This, in turn, helps to support the wide range of biodiversity found in the district.

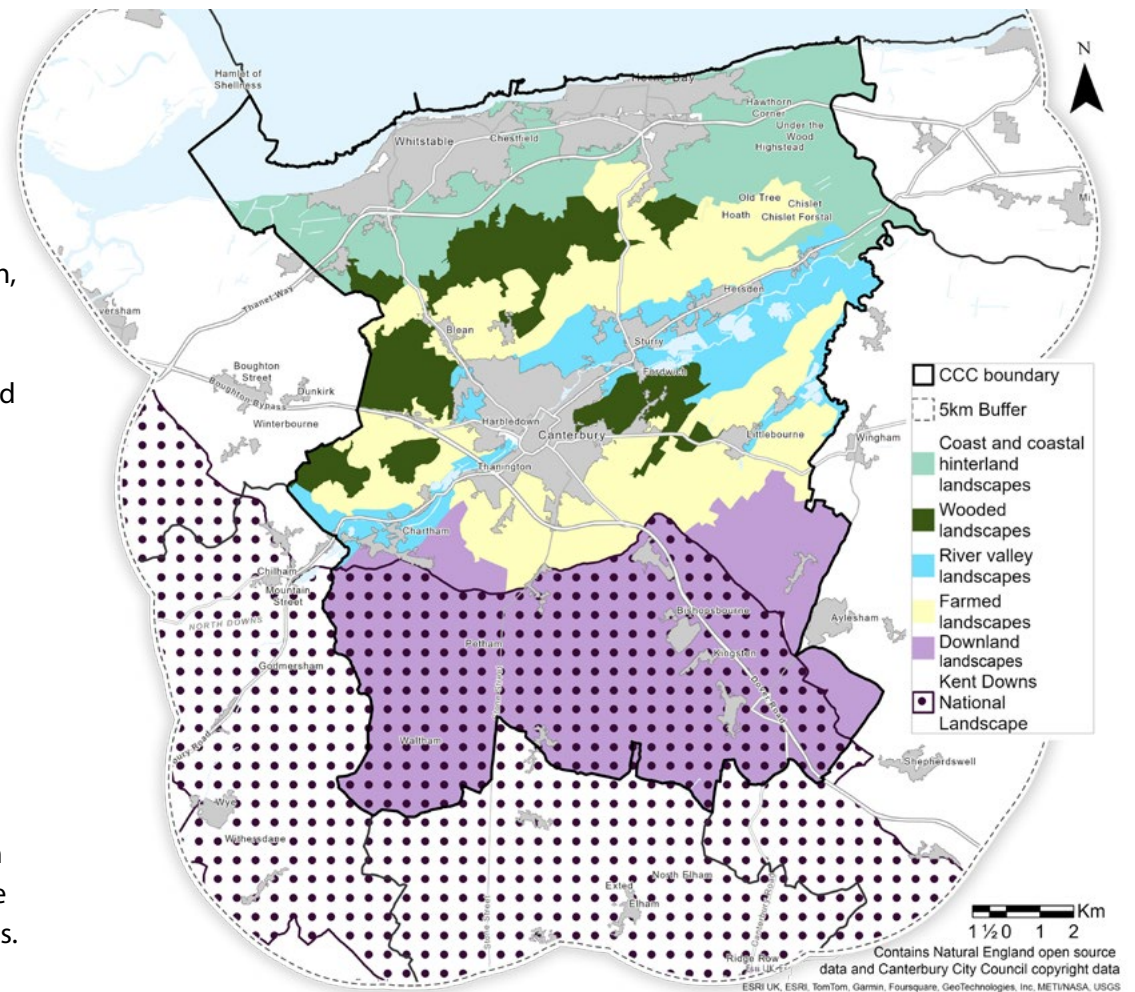
The landscapes of Canterbury run in broad sweeps across the district.

Overview of coastal and coastal hinterland landscapes

To the north of the district are coastal landscapes. Some undeveloped areas remain within the coastal towns of Herne Bay and Whitstable, including at Long Rock which lies between the two towns and is an area of shingle and wet grassland and an important site for bird species and moths. To the east of Herne Bay lie Bishopstone and Beltinge Cliffs and Reculver Country Park.

To the west of the towns at Graveney and Seasalter and along the eastern boundary bordering the Wantsum Channel is a low-lying, open landscape of grazing marshes and ditches which is important for overwintering birds.

To the south of the towns is a transitional landscape between the coast and The Blean woodlands, of undulating mixed arable lands with trees, hedgerows and some small pastures. This landscape is experiencing



Plan 1: Overview of Landscapes of Canterbury district

urbanisation from development and the intrusion of the A299, which creates a barrier for some wildlife, although there is one green bridge across the road at Chestfield Golf Course.

Overview of wooded landscapes

The Blean woodland complex is the most extensive of the wooded landscapes in southern England. The Blean lies on higher ground between the City of Canterbury to the south and the coast and coastal towns to the north, extending from the edge of the Wantsum Channel to the east to north of Chartham in the west. The woodlands here are extensive and, in part, well-connected and full of wildlife. Many of the woodlands are ancient meaning they are over 400 years old. Large areas are protected by national and international designations and owned and managed by conservation charities. There is an active project (The Wilder Blean) being taken forward with conservation partners and landowners to restore and connect habitats across The Blean woodlands.

Another wooded landscape lies to the east of Canterbury City. Chequers Wood and Old Park SSSIs are on the eastern outskirts of Canterbury City and valuable mosaic of ancient woodland, scrub and acid grassland. Further to the east are the woodlands, coppice and ancient deer park around Trenley Park Woodlands.

Overview of river valley landscapes

The Great Stour River cuts across the Canterbury district, entering at Chartham, flowing through the City of Canterbury and bringing nature into the city itself. The Little Stour is a much smaller river which flows from Littlebourne to join the Great Stour around Grove. The upper reaches are the Nailbourne – a river which only sporadically flows and which is sometimes dry. Both rivers are very rare chalk rivers.

Alongside the rivers are floodplain meadows, woodlands, including pockets of rare wet woodland, orchards, pastures and lakes formed from former gravel workings.

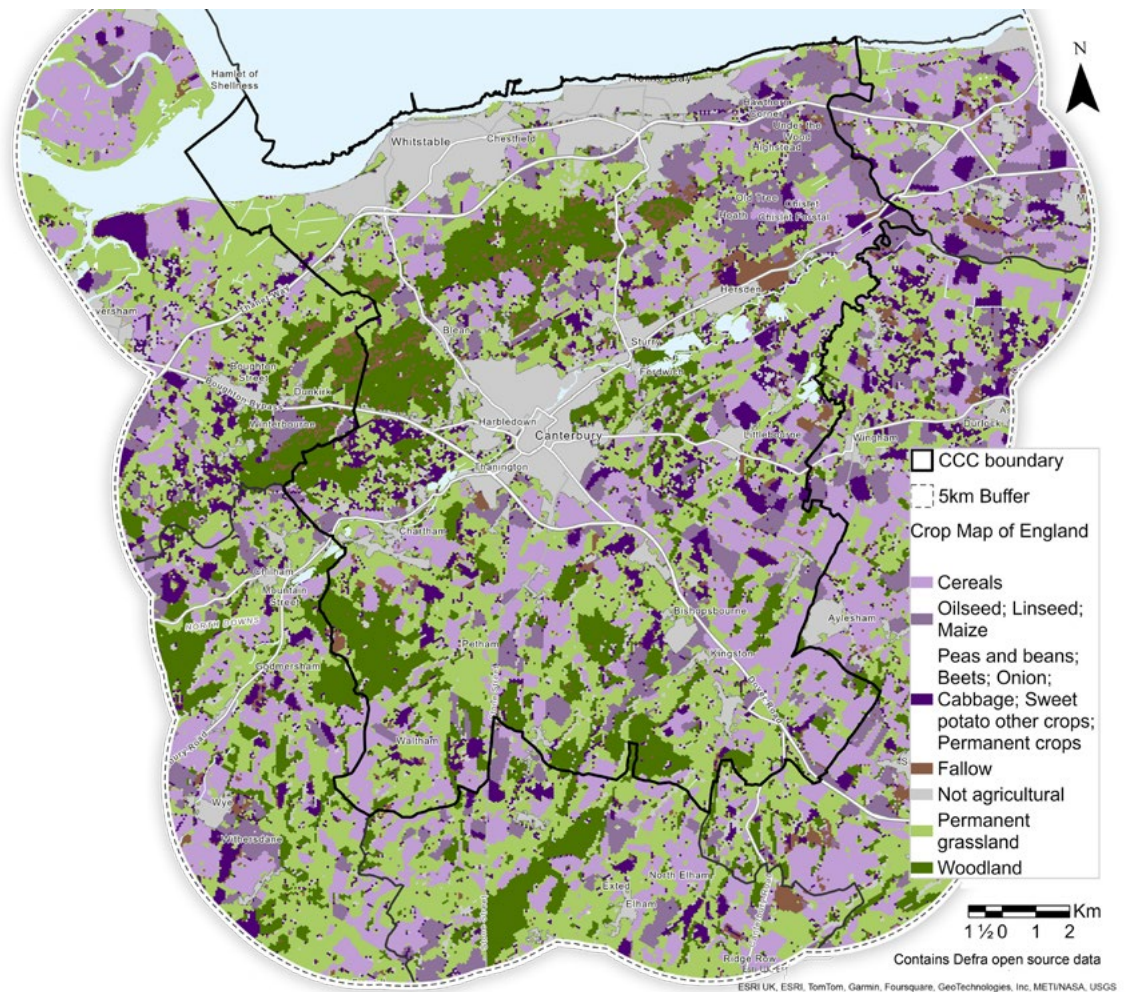
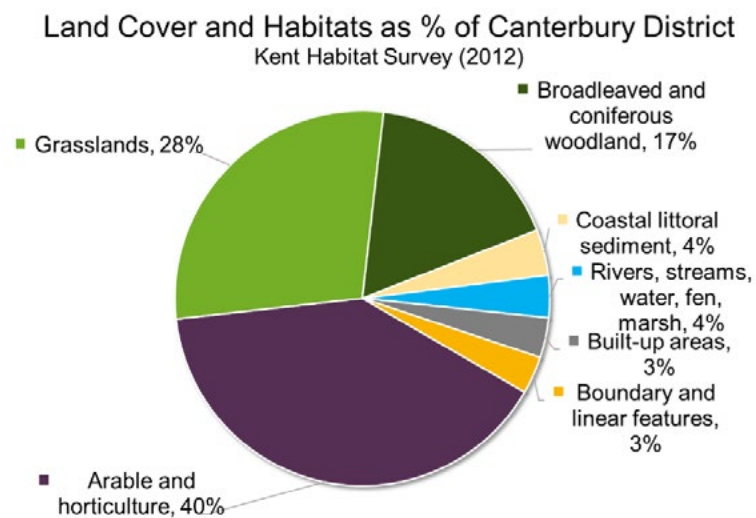
Overview of downland landscapes

In the south of the district are the downland landscapes. Part of this area is recognised for its outstanding landscape beauty and is within the Kent Downs National Landscape. The downlands are a landscape of rolling hills and valleys, extensive woodland and hedgerows, especially on the western side of Canterbury district. It is here that there remain small areas of chalk grassland with their numerous orchids and other wildflowers, along with ancient woodlands. The eastern side is more open, with areas of large arable fields.

Land cover

The Kent Habitat Survey (2012) recorded that around 40% of the district is under arable and horticultural management (growing crops and fruit). As shown in Plan 2, most of this is in the eastern part of the district and south of the City of Canterbury.

Grasslands are the next highest land use cover, at 28%. These are to the north of the City of Canterbury and along the western side of the district and in the Kent Downs National Landscape. These are also the areas where there are the most woodlands.



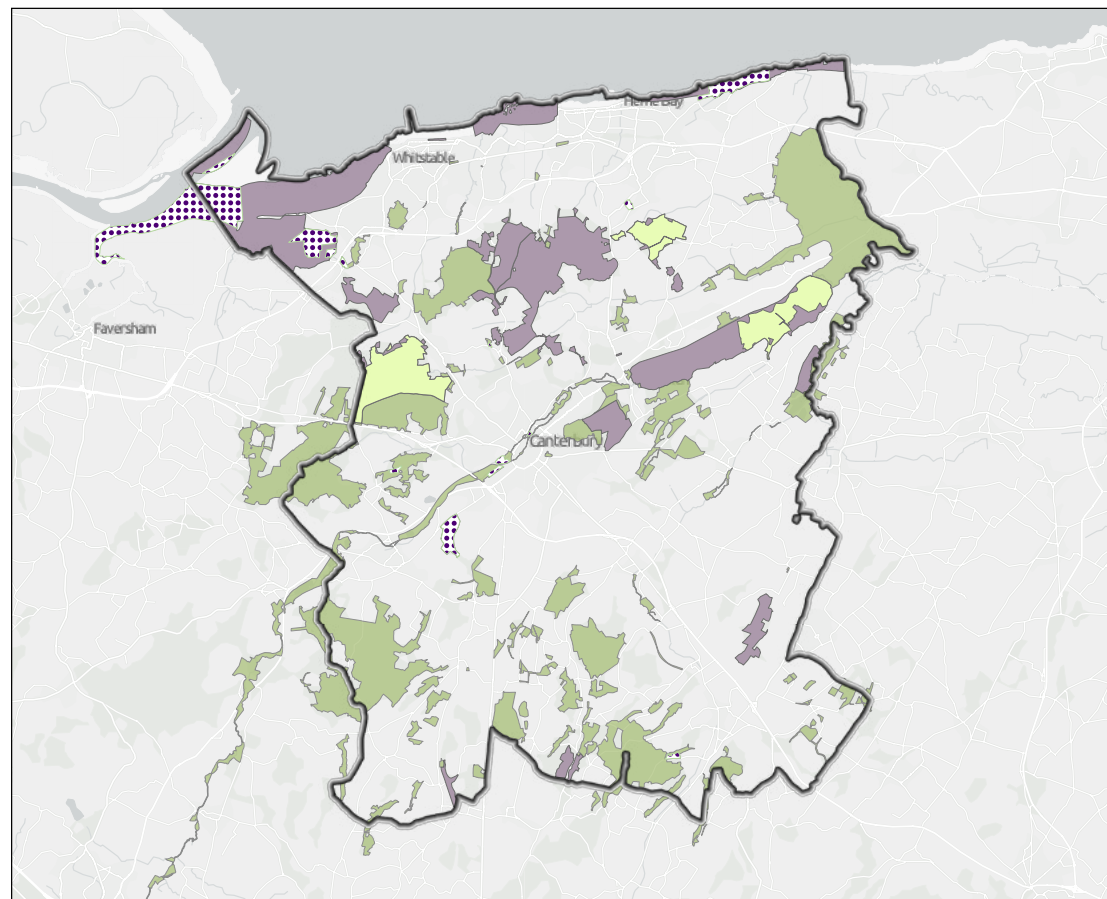
Plan 2: Overview of land cover Canterbury district

Designated nature sites

The richness of Canterbury's biodiversity is recognised in the number of sites which are designated for their nature conservation interest at a local, national and international level. Some sites fall within several designations.

Nationally Important Sites: Sites of Special Scientific Interest (SSSIs) are of national biodiversity importance. National Nature Reserves (NNRs) represent the best examples of SSSIs.

Locally Important Sites: Local Nature Reserves (LNRs) are locally designated sites which are important for people and wildlife. There is usually public access. Local Wildlife Sites are also sites which are identified as being of local significance for nature.



Plan 3: Overview of Locally and Nationally Designated Sites

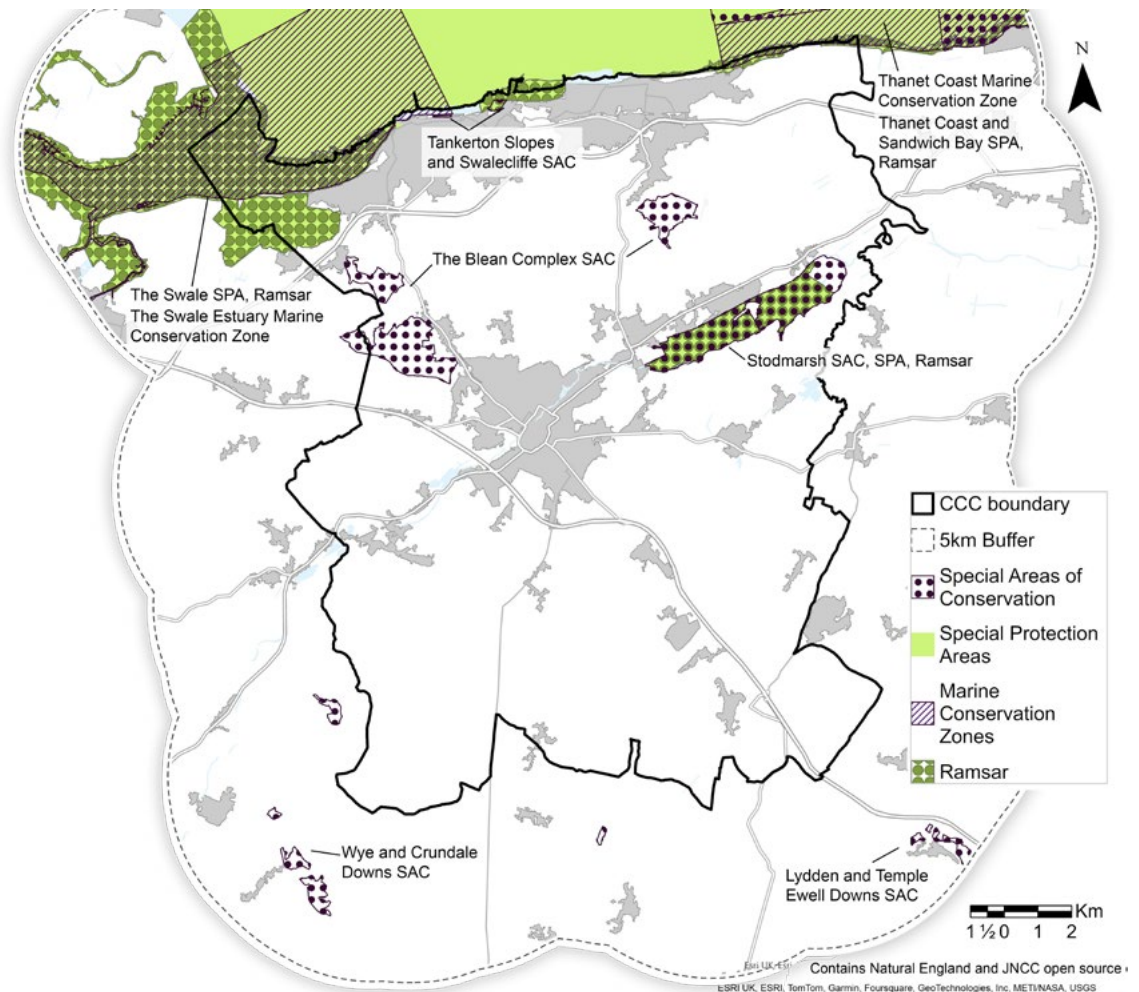
Internationally Important Sites: Several sites in Canterbury district are designated for their international significance. Special Protection Areas (SPA) are protected to safeguard the habitats of migratory and particularly threatened birds; Special Areas of Conservation (SAC) are protected for their habitats and Ramsar sites are wetlands of international importance.

Marine Conservation Zones: There are two nationally designated Marine Conservation Zones in the district: The Swale Estuary Marine Conservation Zone and the Thanet Coast Marine Conservation Zone.

Summary of designated sites

Designation	Number	Area in district
Sites of Special Scientific Interest	14	3,601 ha
Special Area of Conservation (overlaps SSSIs)	3	1760 ha
Special Protection Area 1 (overlaps SSSIs)	3	1069 ha
Ramsar (some overlap SSSIs)	3	1083 ha
National Nature Reserve (overlaps SSSIs)	2	708 ha
Local Nature Reserves (some overlap SSSIs)	11	401 ha
Local Wildlife Sites	49	3,953 ha

The designations totalled above overlap in many cases. The total of land designated for nature in Canterbury district is 7584 hectares, or 22% of Canterbury district.



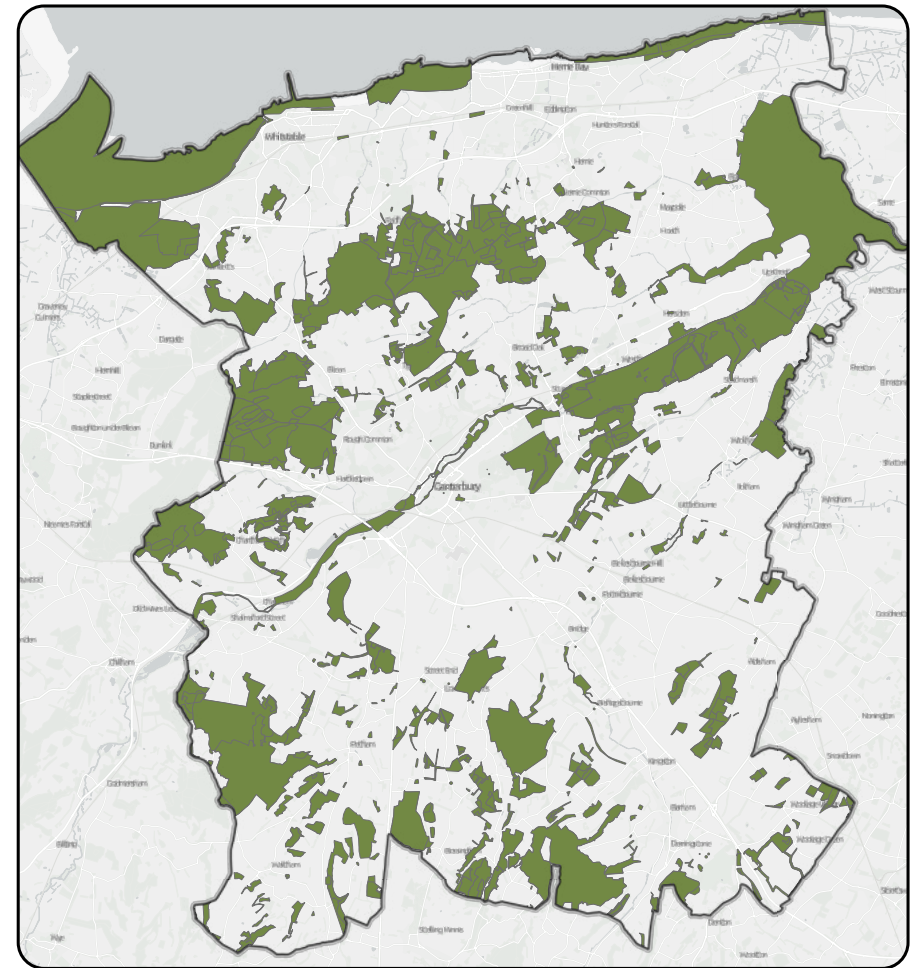
Plan 4: Overview of internationally designated sites

Areas that could become of particular importance for biodiversity in the Canterbury district

The KMLNRS has mapped Areas of Particular Importance for Biodiversity (APIB) and Areas that Could Become of Particular Importance for Biodiversity (ACIB).

The APIB map captures all land in the Canterbury district that has legal or policy protection for its habitats or species. This includes Ramsar sites, Special Areas of Conservation, Special Protection Areas, Sites of Special Scientific Interest, National Nature Reserves, Local Wildlife Sites and local nature reserves. The marine and coastal landscape has the highest level of protection, followed by the extensive ancient woodlands of the Blean.

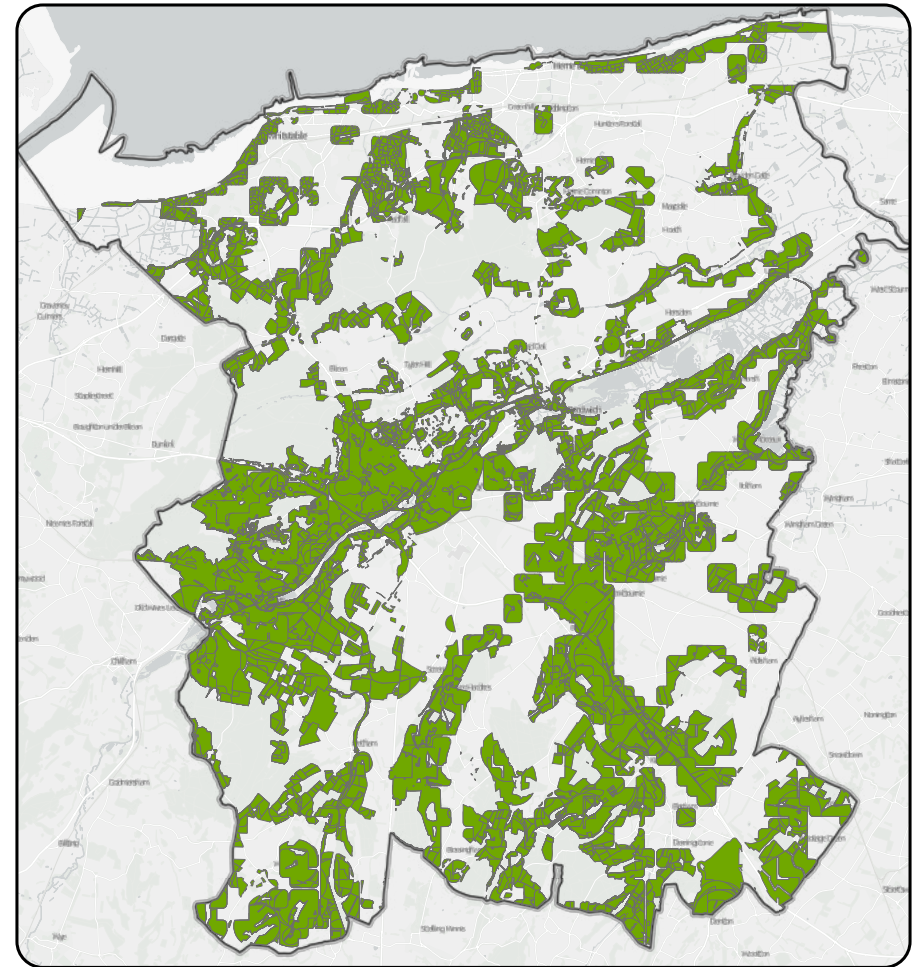
The APIB map identifies the core areas of existing biodiversity interest across the district, and maintaining these areas is a priority. The ACIB plan identifies areas outside the APIBs that, together, form opportunities to create new habitats and support species management, helping to connect and buffer the most important areas for biodiversity. Together, the APIB and ACIB inform the district's nature



Plan 5: Areas of particular importance for biodiversity

recovery vision and actions. We have therefore listed representative KMLNRS potential and wider measures alongside the actions promoted in this strategy:

- KMLNRS potential measures: actions or opportunities identified through the Local Nature Recovery Strategy process, such as habitat creation, restoration, enhancement, buffering, or better ecological connectivity.
- KMLNRS wider measures: related actions that may not be specific mapped KMLNRS priorities but still support the same aims— for example policy protections, management changes, partnership work, funding mechanisms, or complementary local initiatives.



Plan 5a: Areas that could become of particular importance for biodiversity

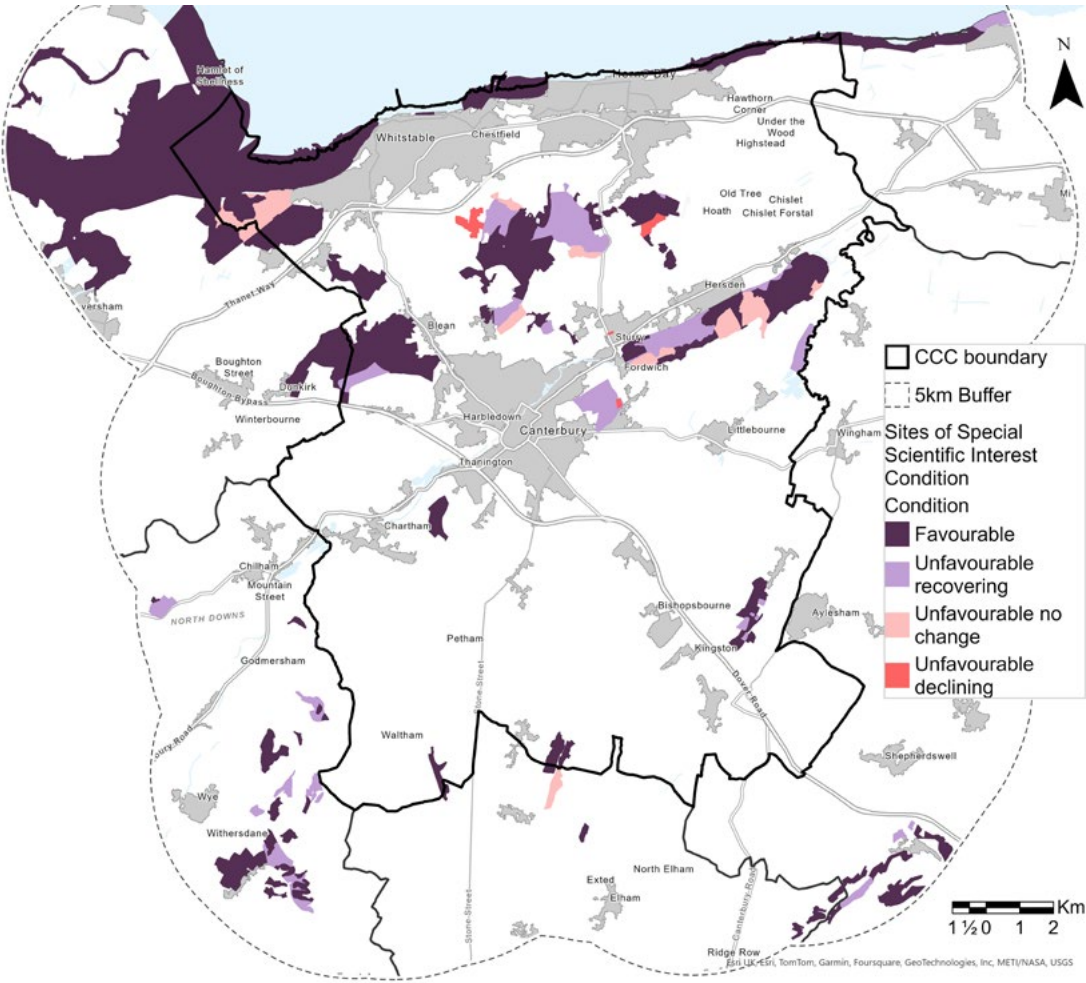
Condition of nationally important areas

Sites of Special Scientific Interest form the top tier of the core biodiversity network. These sites are assessed for their condition, although some of these assessments may have been carried out several years ago, they still provide information on the condition of the sites for biodiversity. The quality of the SSSIs in Canterbury district is 71%, which is slightly below the government’s target of 75% of SSSIs in favourable condition. This compares with 69% for Kent in 2020.⁵

Some SSSIs etc are in the ownership of organisations managing them for wildlife and Canterbury City Council and nature conservation management on these sites is therefore secure.

Condition of Sites of Special Interest in Canterbury district⁶

Condition (Natural England data 2024)	Area hectares	%
Favourable	2,568	71%
Unfavourable recovering	648	18%
Unfavourable no change	327	9%
Unfavourable declining	58	2%



Plan 6: Sites of Special Interest – condition of units

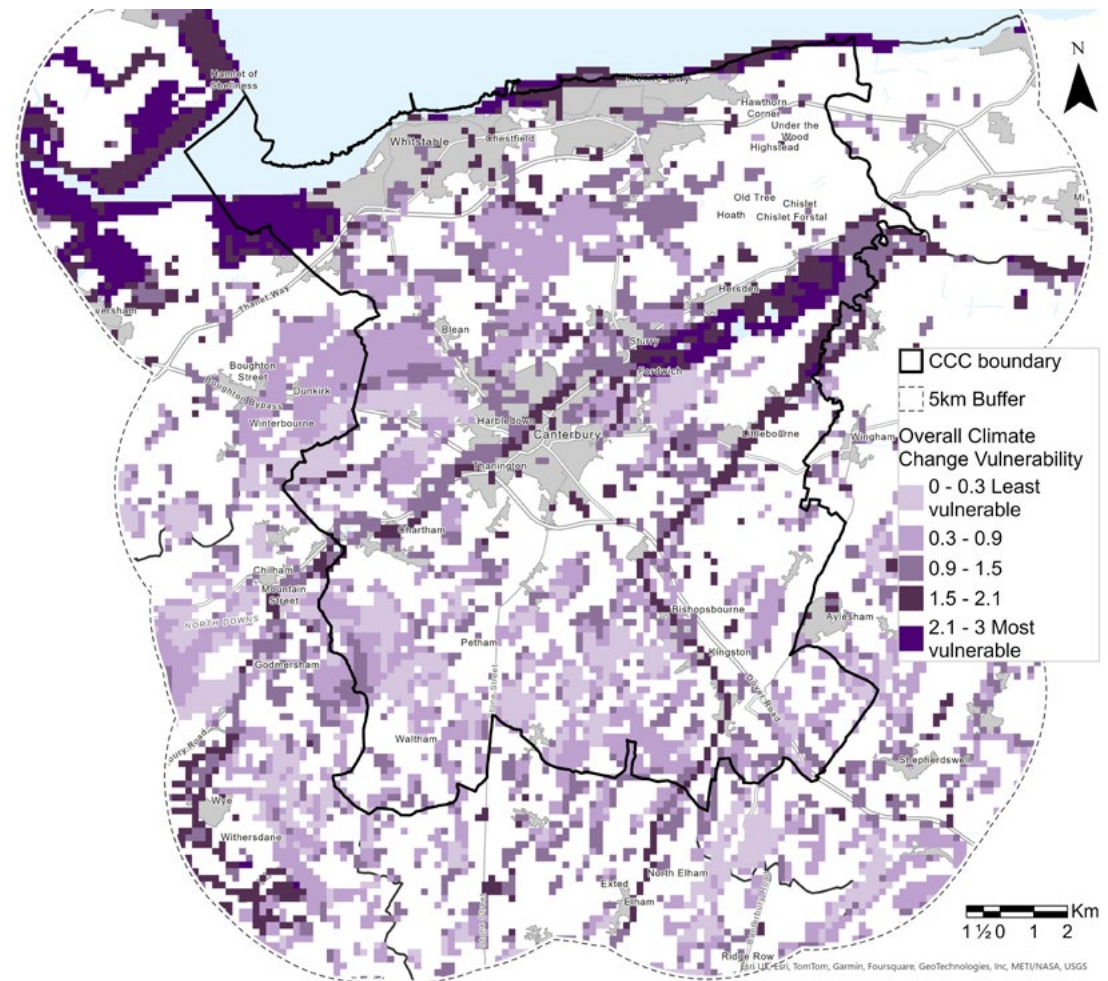
Climate change vulnerability

Climate change will create direct and indirect pressures on biodiversity. Many species and habitats are strongly influenced by temperature and rainfall and the interactions between these.

Natural England's climate change vulnerability model estimates the vulnerability of priority habitats on land. Areas which are not priority habitats are not included. Four measurements are used which together estimate climate change vulnerability:

- **Sensitivity to change** – each habitat type is classified as having high, medium or low sensitivity to climate change.
- **Habitat fragmentation** – measures how isolated areas of the same habitat are and how permeable the surrounding landscape is. Larger patches of habitat can support larger populations and are less susceptible to extremes, and better connections allow species to move in the landscape.
- **Variation in height and aspect** – less variation can increase vulnerability.
- **Management and condition** – poor condition and existing negative impacts can increase vulnerability.

Habitats which are highly sensitive with low capacity to adapt to climate change impacts, score higher and are more vulnerable.



Plan 7: Natural England climate change vulnerability model

Habitats which are less sensitive to climate change impacts and are more able to adapt are less vulnerable and score lower.

The guiding principles developed by the UK Biodiversity Partnership for biodiversity adaptation action guide to what is needed for biodiversity as the climate changes:

- Conserve existing biodiversity through conserving protected areas, high-quality habitats and the range and ecological variability of habitats and species
- Reduce sources of harm
- Develop ecologically resilient and varied landscapes through conserving and enhancing local variation within sites and habitats and making space for the natural development of rivers and coasts
- Establish ecological networks through habitat protection, restoration and creation
- Make decisions based on analysis of the causes of change and respond to changing conservation priorities
- Integrate adaptation and mitigation measures into conservation management, planning and practice

Overview: Highly vulnerable habitats - highly sensitive habitats with low capacity for adapting to climate change.

Areas	Reasons
Rivers and river corridors – River Stour, Little Stour and Nailbourne.	Rivers and river valleys are moderately sensitive.
Wetland areas – Stodmarsh and Seasalter.	Wetlands are sensitive (Seasalter maximum sensitivity and Stodmarsh moderate sensitivity).
Areas of highly fragmented habitats eg between The Blean and Whitstable/ Herne Bay, south of Canterbury.	In some areas habitat condition is not optimal and does not support adaptation to climate change.
Coastal habitats.	In some areas habitats are fragmented.

Overview: Moderately vulnerable - medium sensitivity and medium capacity to adapt to climate change, or low sensitivity but also a low capacity to adapt to change.

Areas	Reasons
Edges of larger blocks of habitats.	Greater fragmentation at the edges of larger habitat blocks.

Overview: Less vulnerable - Low sensitivity habitats and high capacity to adapt to climate change.

Areas	Reasons
Woodlands - The Blean and woodlands to the southwest of district.	Better connected habitats, less fragmentation.
	Habitats have low sensitivity to climate change.
	Condition is good

Part 4: Canterbury district's habitats and species



Heath Fritillary Butterfly

This section sets out the status of nature in Canterbury district, as far as is known. It highlights the habitats and some of the iconic species of the district.



Those habitats which have been identified by the Kent Nature Partnership as being priority habitats. These are marked with a green leaf.



Those habitats which are UK priority habitats are marked with a purple leaf.

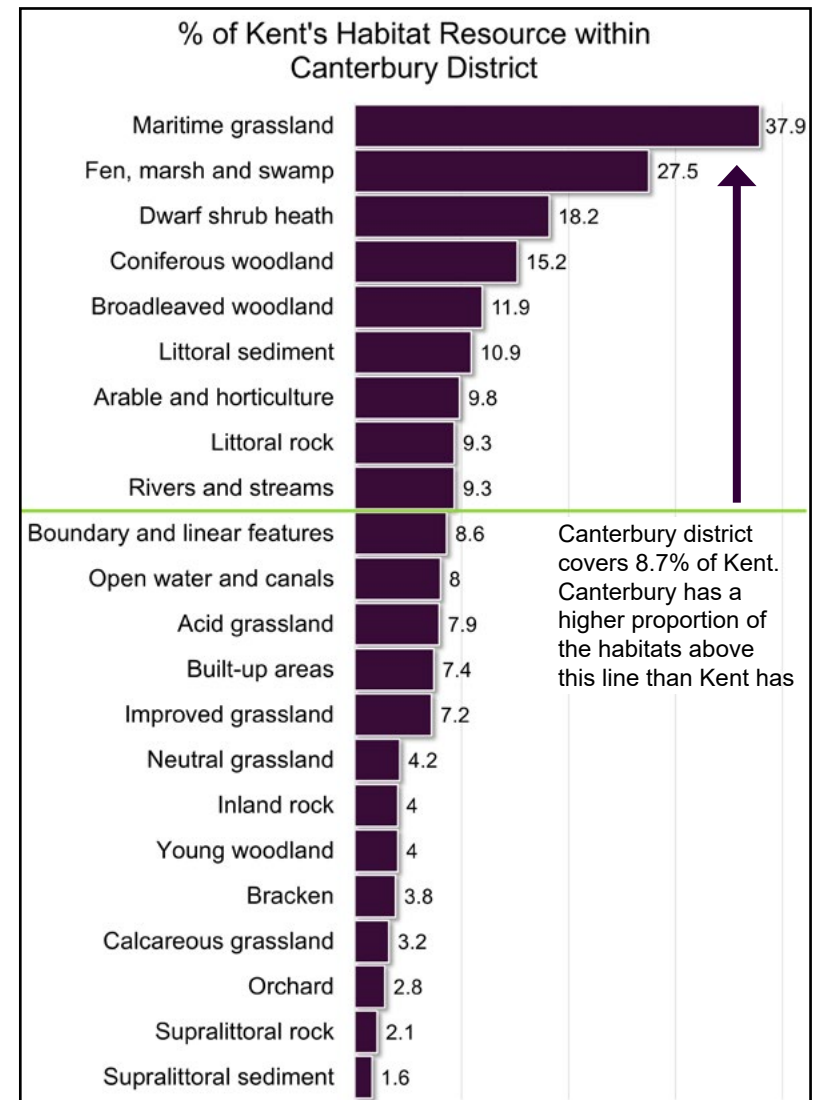


The Kent Nature Partnership has also highlighted priority and indicator species. These are marked with a purple butterfly.

The information available on trends, condition, pressures and threats to habitats and species is often at a Kent scale, rather than for Canterbury district. The most relevant information has been used, but further understanding at a district level will help to improve this strategy in the future.

The habitats and species on the next page are important in Canterbury district and are included in this strategy.

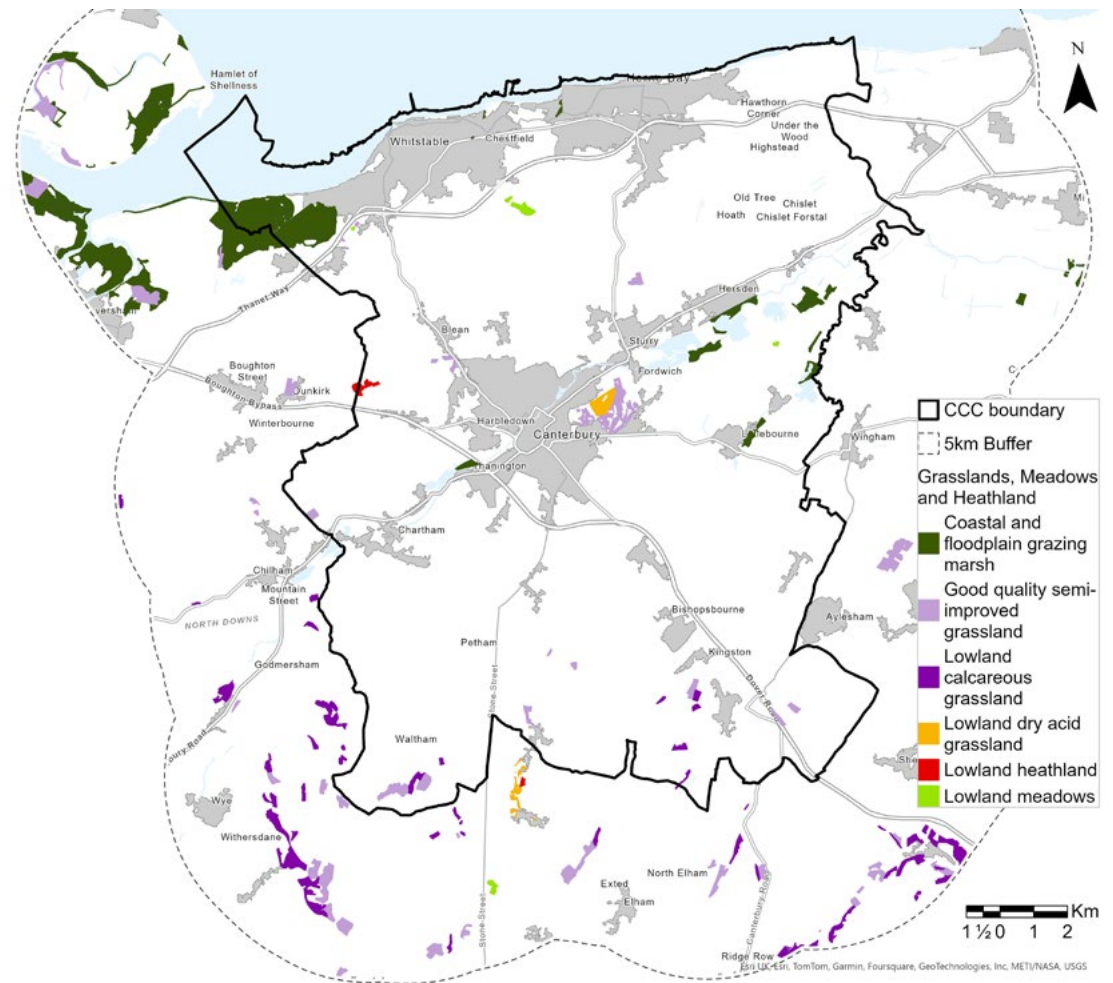
The chart to the right shows what percentage of the overall Kent resource of habitats is within Canterbury district.⁷



Grasslands, Meadow and Heathland Habitats

At 86% of all Canterbury district's grassland, improved grassland is the most abundant. However, the grasslands which are of the greatest importance for nature are those which have not been improved through adding fertiliser, using herbicides or through re-seeding – 14% of the district's grasslands. These often still contain a wide range of flower and herb species which, in turn, support an array of insects, including pollinators, and other wildlife. They can also be an important part in a mix of other habitats, such as scrub and woodland.

There are also many areas of grassland in other places – in parks, along roadsides and suburban streets as well as in thousands of gardens. While these are not usually of high conservation value, their nature conservation value can still be increased to support more wildlife and can become important for pollinator species. Action taken in many small grassland areas can add up to a large impact and benefit as shown through the widespread adoption of 'No Mow May' and 'Let it Bloom in June'.

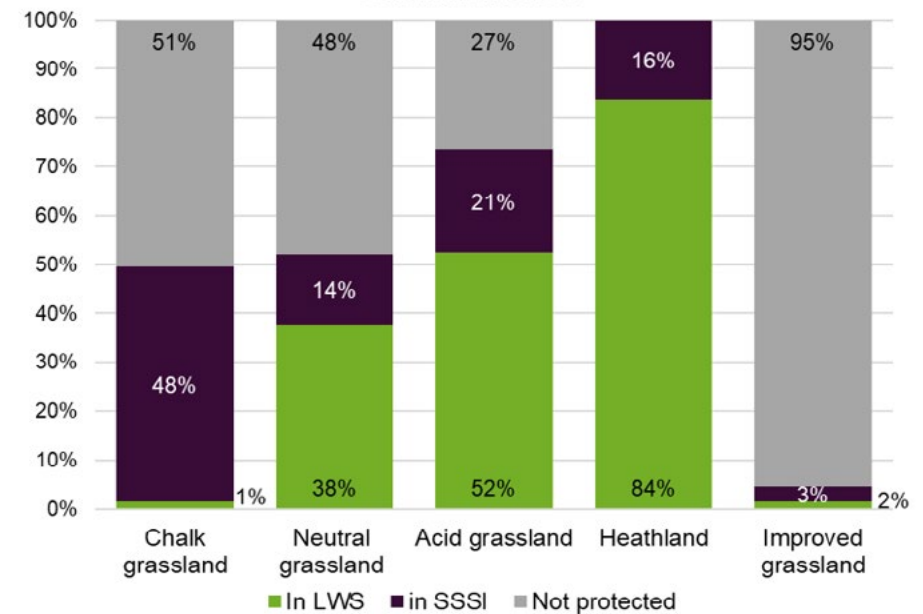


Plan 8: Grassland Habitats – Natural England Priority Habitat Inventory

Summary of grassland, meadow and heathland habitats in Canterbury district⁸

Habitat	Hectares	% of Kent's habitat in Canterbury district	% of all Canterbury's grassland habitat which is of this type	% cover of whole district	% in Local Wildlife Site or Site of Special Scientific Interest
Chalk grassland	61	3.2%	0.6%	0.2%	50%
Neutral grassland	1210	4.2%	12.4%	3.6%	52%
Acid grassland	40	7.9%	0.4%	0.1%	74%
Heathland	13.5	18.2%	0.1%	0.04%	100%
Improved grassland	8414	7.2%	86.4%	24.7%	5%
Total	9739	-	100%	28.6%	-

Proportion of grassland, meadow and heathland habitats in local wildlife sites or Sites of Special Scientific Interest



Chalk grassland

Also known as calcareous grassland, this habitat is found on the Kent Downs in the south of the district. This grassland is iconic for Kent, with southern England being a stronghold for this internationally rare habitat. The habitat can be made up of a great diversity of rare and distinctive plants, including many species of orchid. Varied insect life is also found in this grassland including scarce species such as Adonis Blue.

Lowland meadows

These grasslands on neutral soils were traditionally managed as hay meadows, with grasses and flowers mingling together, and buzzing with insect life. Unfortunately, these types of grassland were the most productive to be improved for grazing or grass production. This is one of the habitats which has suffered the greatest loss in the last 80 years.

Coastal and floodplain grazing marsh

Floodplain grazing marsh is created by draining river floodplains, while coastal grazing marsh is created through draining saltmarsh. The range of species in the grassland can be varied – sometimes there is a wide range of species but often the variety is quite low. The quality of the habitat largely depends on the intensity of farming, as these grasslands are productive pastures. The mix of grassland criss-crossed with drainage ditches, hollows and ponds, which is sometimes flooded, makes this a valuable habitat.

A range of species, such as water voles and water-loving rare insects are associated with it. Grazing marsh is also used as feeding and roosting habitat by internationally important populations of waterfowl.



Common Spotted Orchid

Climate change brings particular threats to this habitat. The early onset of the growing season may create less favourable conditions for the nesting birds associated with this habitat. Increases in water abstraction could alter the water table and lead to further drying. Changes in sea level could result in areas being lost and lead to saline water entering the habitat.

The largest area of grazing marsh is at Seasalter Levels and Graveney Marshes, west of Seasalter. Smaller areas of marsh are found along the River Stour and the Wantsum Channel.

Acid grassland and heathland

Acid grassland is made up plant species which can tolerate sandy or gravelly acidic soils. It is rare in Kent, but there are some small areas within Canterbury district. The largest is within Chequer's Wood and Old Park SSSI to the east of Canterbury City. Some areas might be bare, with mosses and lichens. This habitat also supports some uncommon insect species including beetles.

Heathland is not grassland but is included in this section as it is often inter-mixed with acid grassland. It is a habitat of small, woody shrubs. To be heathland at least a quarter of the plants must be heather. It is a very rare habitat in Kent, and also in the Canterbury district; however, 18% of all of Kent's heathland is in Canterbury, making this an important habitat in the district. The main areas are in The Blean with some areas in the south of the district where acid soils lie on top of the chalk.

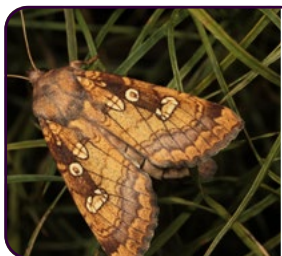
Semi-improved grassland

Semi-improved grassland has been partially improved for agriculture or other uses but still retains some of its biodiversity value. This grassland does not have the same level of nature interest as the other types of grassland described, but it is useful for conservation as it could be restored to support more wildlife, especially where it is near to other more valuable habitats.



Old Park Site of Special Scientific Interest

Our grassland, meadow and heathland species



Fisher's Estuarine Moth

- **Coastal grassland**
- A very rare moth, which feeds exclusively on the also very rare Hog's Fennel



Lapwing

- **Coastal and freshwater grazing marsh**
- A bird of wet grassland. Distinctive 'peewit' call. Forms large flocks.



Green-winged Orchid

- **Neutral and chalk grassland**
- A rare plant of unimproved grasslands



Hog's Fennel

- **Coastal grassland**
- A very rare coastal plant restricted to north Kent and only a few other places in the UK



Redshank

- **Coastal grazing marsh**
- A bird of marshes and mudflats. As its name indicates - it has red legs.



Shrill Carder Bee

- **Urban and coastal grassland**
- A very rare bumblebee only found in a few places in the UK



Skylark

- **Grassland**
- An iconic bird of grassland and farmland

Threats and pressures on grassland, meadow and heathland habitats

The following threats and pressures cause the loss or reduction in the nature conservation value of these habitats. The State of Nature in Kent Report shows that these threats and pressures are relevant to Kent and therefore very likely to be relevant to Canterbury district. However, information on the extent and impact within Canterbury district is not available.

Land management: Grasslands need to be managed for conservation with grazing – with the right level of animals – often the best way of doing this. Without management, scrub establishes. The Kent Habitat Survey recorded that this was the cause of the biggest loss of chalk grassland between 2003 and 2012. However, in the current farming economy it is often difficult to secure animals. Farmers are also reluctant to graze their stock on urban fringe sites or where there is public access due to fears over the safety of stock. Conversely, intensification of grazing, along with the addition of fertilisers and a move to silage from hay production also reduce the range of flowers. This, in turn, affects the number of pollinating insects. For wet grassland, including coastal and floodplain grazing marsh, changes to land drainage can be negative.

Fragmentation: In many cases there are only small areas of these habitats left, and they are often isolated. This makes them particularly vulnerable – smaller sites are inherently more vulnerable to loss, and plant and animal species cannot move the distances between the sites. Roads and other barriers also decrease the connections between the sites.

Direct loss: Grasslands can be lost to development, roads, quarrying or a wide range of other development. Some grasslands may be ploughed for arable land or changed to other farming. Trees and woodlands are planted on grassland – it is important that new tree planting does not destroy valuable grassland habitats.

Increase in nutrients: The wide range of plants found in these grasslands and in heathland is due to the soil having low nutrients. Many plant species in these grasslands are very sensitive to an increase in soil nutrients and two thirds of wildflowers need low or medium levels of nitrogen. They are quickly lost when fertilisers are added and robust species such as Nettles take their place. Agricultural improvement has led to the estimated loss of 97% of lowland meadows since 1935.

Air pollution: Nitrogen which is deposited directly from the air and in rain also enriches the soil. This can be a significant route for nutrient increases in heathland and acid grassland, which are less likely to be improved for agriculture. Air pollution also creates more acidic conditions, upsetting the delicate balance of the habitats.

Climate change sensitivity of grassland, meadow and heathland habitats ⁹		Chalk grassland	Lowland meadows	Coastal and floodplain grazing marsh	Acid grassland	Heathland
Overall climate change sensitivity		Low	Medium	Medium	Low	Medium
Cause	Potential impacts					
Hotter summers	Flowering and seeding could change significantly, taking place earlier in the year.	✓	✓	✓	✓	✓
	Increase in bracken.				✓	✓
	Less favourable feeding and nesting conditions for birds associated with wet grassland habitats.			✓		
Drier summers	Drier conditions and drought will favour some species, for example deep-rooted species, and lead to changes in the composition of species. Loss of fungi, lichen and mosses.	✓	✓	✓	✓	✓
	Habitats reliant on water could suffer due to less water.		✓	✓		✓
	Increased risk of fires.		✓		✓	✓
Wetter and warmer winters	More frequent flooding and increased nutrients could lead to changes in species. Flooding can increase risk of pollution.		✓	✓		✓
	Higher moisture and nutrients available in the soil leading to a change in species and increase in more competitive species.	✓			✓	✓
	Warmer winters could reduce frosts, essential for regeneration of heathland				✓	✓
Sea level rise	Loss of habitats due to sea level rise and ingress of saline water.			✓		
Economic	Changes in the economics of grazing and land management due to climate change impacts could lead to greater loss or could lead to abandonment.	✓	✓	✓	✓	✓

What our review of evidence has shown

Many grassland sites are small, dispersed and unprotected. We must act at scale to protect, expand and connect these habitats.

Biodiverse grassland, meadow and heathland habitats in the district are small and often each site is a considerable distance from nearby similar habitats. It is essential to protect the remaining non improved amenity grassland core sites as Local Wildlife Sites and ensure they are in good condition. We must also work to connect these sites through landscape-scale projects, working with partners. Priorities are The Blean, the River Stour corridor, The Wantsum, the Kent Downs National Landscape and in and around Old Park and Chequers Wood.

There is some protection of grassland, meadow and heathland habitats but not all areas are managed for nature conservation or in a good condition.

All the heathland and three quarters of the district's acid grassland are within a Local Wildlife Site or Site of Special Scientific Interest, and much is also in the custodianship of charities in The Blean. However, only around half of chalk grassland and neutral grassland is designated. Also, being within a Local Wildlife Site does not guarantee that nature conservation is being prioritised. Much of the lower quality grassland has no protection at all. Some parts of Sites of Special Scientific Interest – although highly protected – are not in favourable condition, for example parts of the Graveney Marshes around Seasalter.

Lower quality grassland habitats are also beneficial – and there are a lot of them. Increasing the diversity and wildlife abundance of these grasslands could have a significant impact.

The nature conservation value of grassland everywhere across the district could be improved. This could be through planting or wildflowers or improving management through relaxed mowing regimes.

We must work with partners to effect meaningful change.

Nature conservation grasslands need management through grazing or cutting. Whether this happens often depends on the wider agricultural context – farming economics and whether grants are available for landowners. Influencing this is not in the control of Canterbury City Council. However, the Council can work with and support others such as the Kentish Stour Countryside Partnership to encourage and support landowners. Natural England's East Kent grasslands project has targeted southern parts of the district over 25-30 years to create species-rich grasslands and create landscape-scale networks of linked wildflower grasslands. This work is now showing impressive results for many species including butterflies and farmland birds. The Council can continue to advocate for such projects.

Ensure loss of lower quality grassland through development is compensated for and improvements made.

Biodiversity Net Gain and policies in the Kent and Medway LNRS will help to ensure grassland suitable for wildlife will be created, with developers being encouraged to include wildlife-rich new grasslands in developments.

Actions supporting grassland, meadow and heathland habitats and species

- BA6: Work with the Wilder Blean Partnership (RSPB, KWT, FC, CCC and WT) to address habitat fragmentation and nature recovery through the delivery of 10 key schemes over the next five years.
- BA7: Work in partnership to deliver the Stour Valley Restore initiative, promote biodiversity opportunities along the Great River Stour at Wincheap Meadows, Bingley Island and Fordwich Meadows, and explore the Broad Oak Reservoir biodiversity gain and the establishment of a Great Stour Regional Park.
- BA8: Support partnership opportunities for landscape-scale works within the Wantsum Channel, connections to The Blean and Pegwell Bay E3 initiative, and Canterbury to Coast.
- BA14: Utilise the KMLNRS to identify and promote positive land management and the delivery of biodiversity outcomes at key landscapes and sites such as The Blean complex, Seasalter, the Wantsum Channel, Old Park, and Larkey Valley Woods.
- BA17: Support Contracts and CANENCO's delivery of biodiversity positive grounds maintenance through provision of training and increased awareness.
- BA20: Work with the Canterbury Riverside Group to deliver the Canterbury Riverside Strategy.
- BA26: Consider potential for partnership led external funding strategies for key initiatives / sites including: (a) Old Park and Chequers Wood, (b) The Wantsum initiative, and c) Seasalter Levels.
- BA28: Review the management of land owned by the council, the universities, schools, Housing Revenue Account, MoD, and hospitals, and promote biodiversity measures such as pollinators.
- BA30: Reference KMLNRS in the provision of SuDS and semi natural open space, and delivery of 20% canopy cover and 20% BNG, making maximum use of the opportunity to strengthen habitat connectivity in pre-application and planning decisions.

Related actions in Canterbury City Council strategies

Green infrastructure strategy

- Urban greening, managing greenspaces for biodiversity, including parks and amenity greenspaces.
- Managing CCC owned land to maximise biodiversity.
- Improving biodiversity in and around Old Park.
- Landscape-scale biodiversity: including chalk grassland (Kent Downs National Landscape) and heathland (The Blean).
- Sets out strategic green corridors along which to improve biodiversity.

Pollinator action plan

- Grassland management for pollinators; improving floristic diversity.
- Creating new flower-rich grassland in rural and urban areas.
- Creating pollinator corridors.

Canterbury tree, woodland and hedgerow strategy

- Principle that tree expansion should not take place on high biodiversity value grassland or heathland.

Canterbury riverside strategy

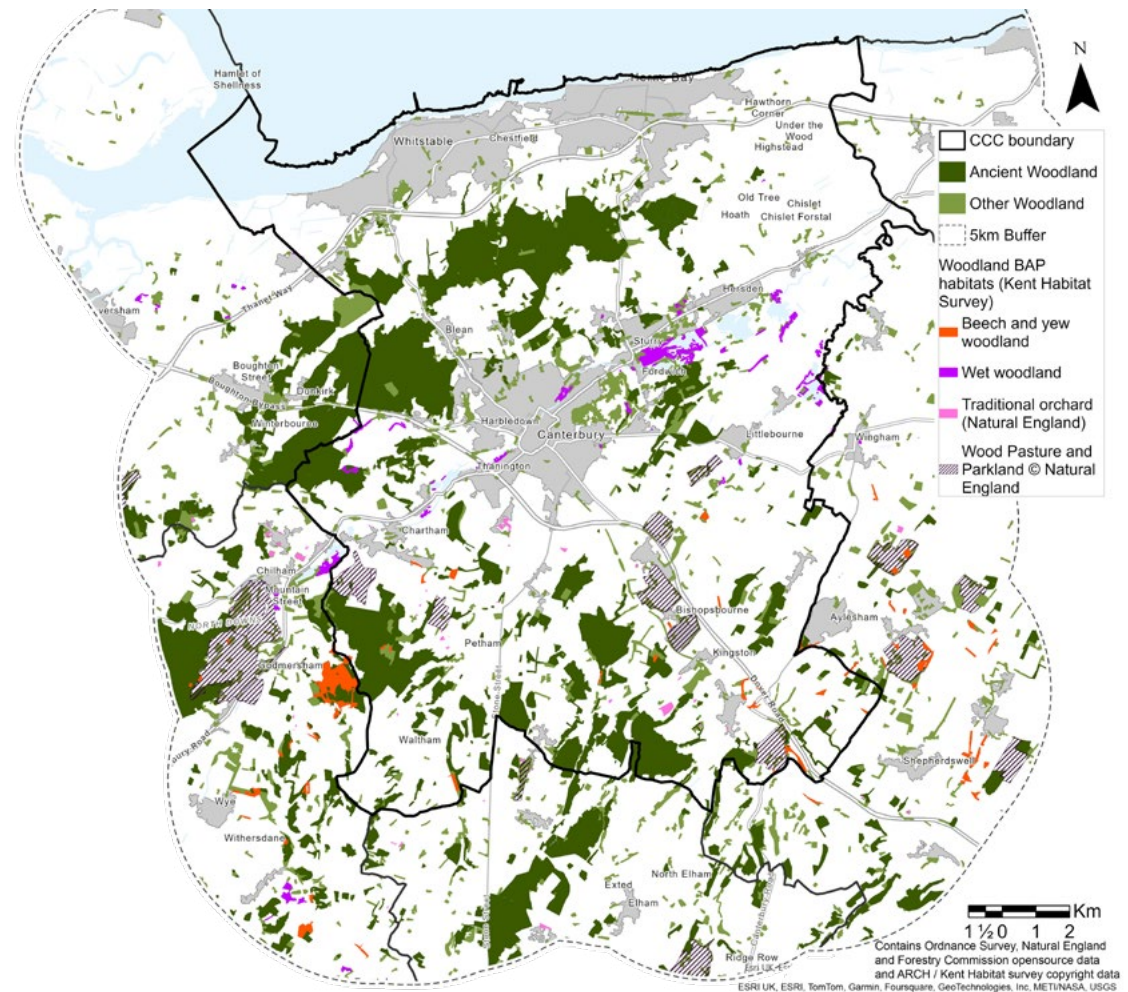
- Riverside habitat enhancement, including for pollinators.
- Management of riverside Local Nature Reserves and other greenspaces.

Woodlands, trees, hedgerows and scrub

Canterbury district has some of Kent's largest and most connected blocks of woodland, making them outstanding for wildlife. The district has more than its share of many woodland priority habitats, including all of Kent's internationally protected oak-hornbeam woodland. The Kent Habitat Survey recorded that 15.6% of the district is woodland.

There are large blocks of connected woodland in The Blean, stretching across the entire area between Whitstable and Herne Bay and City of Canterbury and westwards into neighbouring Swale borough. Similarly, to the southwest of Canterbury City are many woodlands which connect across the Kent Downs National Landscape. These link to The Blean at Chilham. To the east of the City of Canterbury lies a network of woodlands along the Stour Valley. These extend into City of Canterbury through the Chequers Wood and Old Park Sites of Special Scientific Interest.

Around three-quarters of Canterbury district's woodlands are ancient (76%). Ancient woods have persisted since 1600 and are relatively undisturbed by human development. As a result, they are unique and complex communities of plants, fungi, insects and other microorganisms.

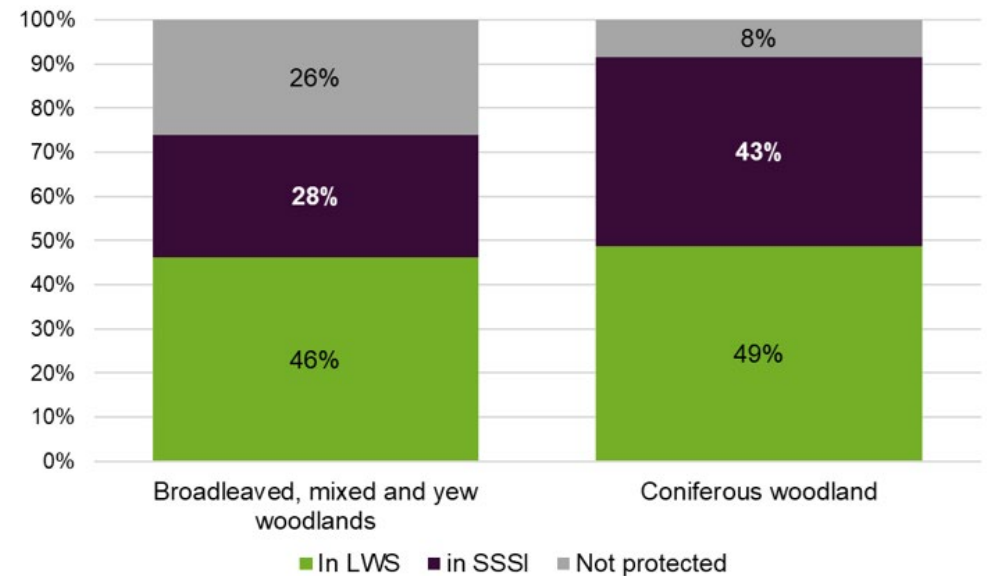


Plan 9: Woodland Habitats

Summary of woodlands, trees, hedgerows and scrub habitats in Canterbury district¹⁰

Habitat	Hectares	% of Kent's habitat in Canterbury district	% of all Canterbury's grassland habitat which is of this type	% cover of whole district	% in Local Wildlife Site or Site of Special Scientific Interest
Broadleaved, mixed and yew woodlands	5292.0	11.9%	91.2%	15.6%	46%
Coniferous woodland	510.1	15.2%	8.8%	1.5%	49%
Total	5802.1	-	100%	17%	-

Proportion of woodlands, trees, hedgerows and scrub habitats in local wildlife sites or Sites of Special Scientific Interest



Lowland mixed deciduous woodland

This woodland can take many forms and have a wide range of trees and species associated with it. Deciduous woodland may be of ancient or recent origin and can either arise from natural regeneration or having been planted. These woodlands have a canopy of large trees, often Oak or Ash trees, with smaller trees and shrubs growing beneath. There can be an array of wildflowers, including in some woodlands, carpets of bluebells. They can support a multitude of

insect species, including butterflies, and are home to many bird species. These woodlands are found throughout Canterbury district.

Lowland Beech and Yew woodland

Lowland beech and yew woodland is found in isolated patches on the chalk plateaus in the south of the district and is a distinctive feature of the Kent Downs National Landscape. It is particularly valuable for insect species which need dead wood and can be home to very rare orchids.



Ancient Woodland – Chequers Wood

Wet woodland

Wet woodland grows on poorly drained or seasonally flooded land. Trees such as Alder, willows and birches thrive in this habitat. Wet and decaying wood create ideal areas for rare insects along with mosses, liverworts and fungi. This habitat is scarce in Kent and has been declining. In Canterbury District this habitat is found around Fordwich and Stodmarsh and in smaller areas alongside the Great Stour and other rivers and streams.

Hedgerows

Hedgerows are important landscape, heritage and habitat features and connect wildlife. In some parts of the district there are species-rich hedgerows of high wildlife value. In other areas there are distinctive shelterbelts, traditionally grown to protect growing fruit. Hedges in urban areas link green spaces. Hedgerow trees are also an important element of hedgerows.

Hedgerows have declined due to arable intensification and insensitive or lack of management. Diseases such as Dutch Elm disease have hastened their decline and Ash dieback will have an increasingly detrimental effect.

There is no data on the length or condition of hedgerows in the district but the Canterbury Landscape Character Assessment shows that networks of good condition hedges remain in some areas, for example near The Blean. However, hedgerows have become significantly degraded between Whitstable and Herne Bay and to the east and south of the City of Canterbury.

Traditional orchards

Traditional orchards are with large, spreading trees, planted at low densities with grazing livestock. Individual trees are long-lived. They host a range of species such as bats which roost in hollow trunks and woodpeckers. Species rely on the fallen deadwood including reptiles and amphibians and insect species such as rare beetles. There are some traditional orchards in the south of the district mainly in the Kent Downs National Landscape.



Traditional Orchard

Wood-pasture and parkland

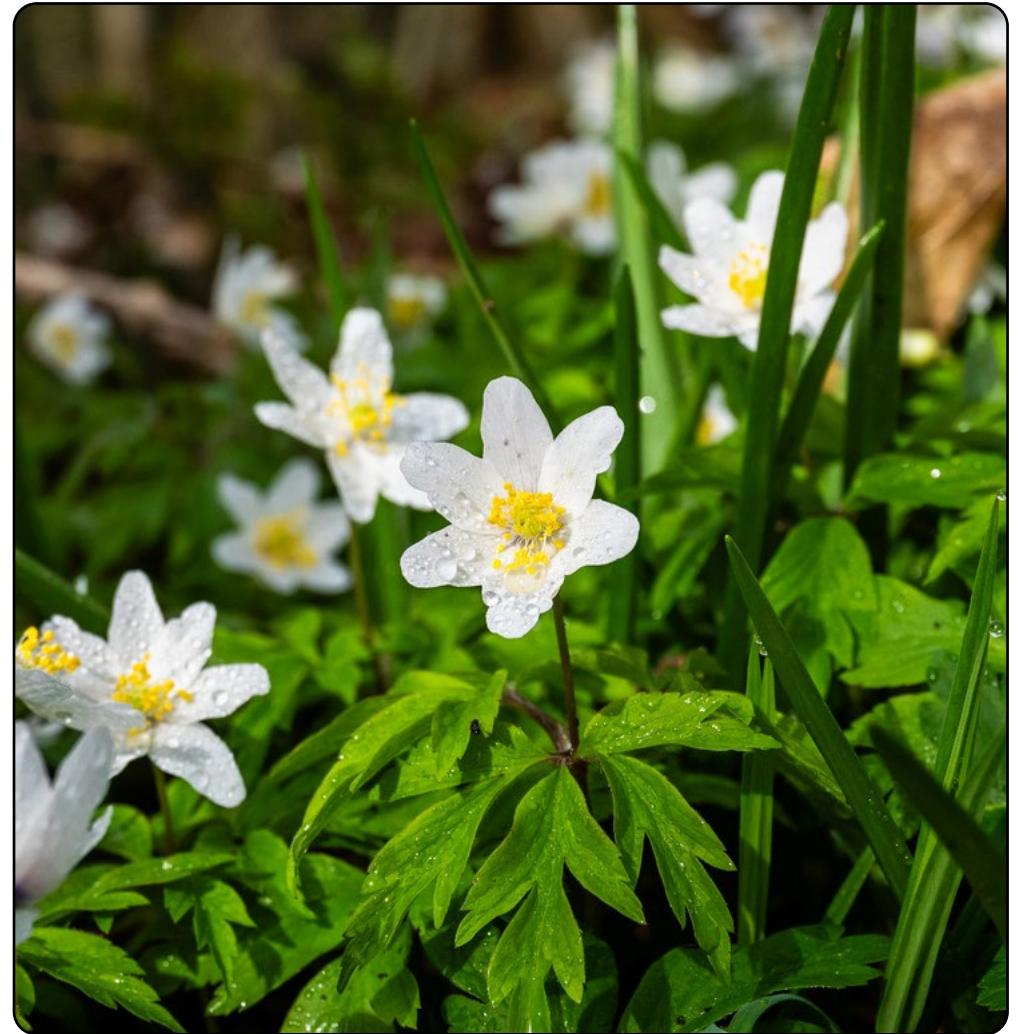
Wood pasture and parkland have been managed through grazing, with scattered trees across the landscape. They are an important part of cultural and landscape heritage and often have high biodiversity value. Trees are often pollarded – cut around 2.5 metres from the ground – to prevent grazing animals from eating regrowing wood. These are often ancient trees, although the area may not be listed as ancient woodland. There are several areas of wood-pasture and parkland habitat in the south of the district.

Scrub habitat

Scrub is often regarded as a habitat between the transition from grassland to woodland. However, it can be an extremely valuable habitat in its own right and a habitat which supports many species. Rare bird species such as Nightingale and Turtle Dove depend on this habitat. Mammals, reptiles, insects and birds all use scrub for shelter, breeding and food sources.

It often forms part of other habitats. Sometimes this can be detrimental if scrub is allowed to spread unchecked, for example growing over species-rich grassland. However, if it is managed, scrub can be a valuable component of the wider habitat. It can also form a useful transition zone around woodlands.

There is no information on the extent of scrub habitats in Canterbury district.



Wood Anemones in Ancient Woodland – Old Park

Our woodlands, trees, hedgerows and scrub species



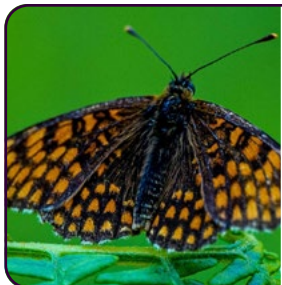
Dormouse

- **Woodland and Hedgerows**
- Endangered mammal, lives in coppice woodland



Nightingale

- **Woodland and Scrub**
- Known for their melodic song, these birds are confined to southern England



Heath Fritillary

- **Coppice woodland**
- One of the UK's rarest butterflies, with a stronghold in The Blean



Reptiles and Ambhians

- **Woodland, Hedgerows and Scrub**
- Range of species found in woodland edges, clearings and scrub



Lady Orchid

- **Chalk Woodland**
- A rare plant of chalky woodlands



Turtle Dove

- **Scrub and Farmland**
- One of the UK's rarest farmland birds, these birds also need scrub to nest

Threats and pressures on woodlands, trees, hedgerows and scrub habitats

Ash dieback: Ash dieback¹¹ is the most significant tree disease to affect the UK since Dutch Elm disease. It will lead to the decline and possible death of the majority of native Ash trees in Britain. The fungus spreads more readily in woodland settings where trees are in close proximity. While some trees may have some tolerance to the disease, research suggests mortality of between 70-85% in a woodland setting.¹² There is currently no cure for Ash dieback and no clear method for stopping its spread.

Increased pests and diseases: The number and range of pests and diseases is likely to increase as the climate changes, with Kent likely to be on the frontline and affected before the rest of the UK.¹³ Some of the pests and diseases of concern can have devastating effects on woodlands.

Management of woodlands: Managed woodlands can support a greater variety of wildlife than those which are unmanaged, particularly where management such as coppicing has stopped. Managing a woodland, if carried out appropriately, can create a range of habitats and structural diversity. Conversely, lack of management, or inappropriate management, can have a significant detrimental effect on the biodiversity of woodlands.

Invasive non-native species: Some wet woodlands are affected by invasive non-native species such as Australian Swamp Stonecrop or Himalayan Balsam. Our native Bluebell is at risk because it hybridises with its introduced Spanish cousin. Other species such as Rhododendron, Cherry Laurel and Periwinkle can dominate woodlands leaving less room for native flora.

Recreational use: Access to woodlands is important for health and wellbeing, but sometimes if the level is too high it can lead to trampling and disturbance of wildlife, especially by dogs. Fly tipping, litter, dumping of garden waste and fires can also damage woodlands.

Wood lotting: Wood lotting is where small parcels of woodlands are sold to new owners. Plots may fall out of management or may be managed inappropriately. When this occurs over large, connected areas of woodland it becomes an issue. There is some evidence that this has taken place in the district, but the extent is unknown.

Climate change sensitivity of woodlands, trees, hedgerows and scrub habitats ¹⁴		Lowland mixed deciduous woodland	Lowland beech and yew woodland	Hedgerows	Wet woodland	Wood-pasture and parkland	Traditional orchards
Overall climate change sensitivity		Low	Medium	Low	Medium	Low	Low
Cause	Potential impacts						
Hotter summers	Increased sun-scorch on leaves and stress on trees.		✓			✓	
	Longer growing season, leading to change in species composition, growing patterns and for some habitats increased management requirements.	✓	✓	✓	✓	✓	✓
Drier summers	Drought conditions leading to stress on trees. Particular stress on veteran and ancient trees.	✓	✓	✓	✓	✓	✓
	Changes in species composition of trees and flora.	✓	✓	✓	✓	✓	
Wetter and warmer winters	Higher survival of over-wintering insect pests leading to greater population and stress on trees and increased prevalence of diseases.	✓	✓	✓	✓	✓	✓
	Fewer frost and winter chills affecting dormancy and success of berry germination			✓			✓
	Waterlogging of soils causing die-back in trees.	✓	✓			✓	✓
	Wetter soils lead to root instability and loss of trees, especially in high winds.	✓	✓	✓		✓	✓
Economic	Changes in the economics of agriculture potentially leading to intensification.			✓			✓
	Management could become more difficult in winter.				✓		
	Increased planting of non-native species	✓	✓				

What our review of evidence has shown

Canterbury district is outstanding for its woodland. It is not only important in Kent but also in southeast England

Many areas of Canterbury district have high numbers of trees and woodlands, higher than the Kent average. In some areas, notably The Blean and in the Kent Downs National Landscape, these are in large joined up blocks. There are also significant areas of ancient woodland and in some parts of the district most of the woodland is ancient.

There are opportunities to work at a large scale to make significant impacts for nature

Canterbury's extensive woodlands provide opportunities to make a significant impact through co-ordinated biodiversity action. An example of this is The Blean where multiple partners are working together. There are opportunities to further expand and connect woodlands and to restore once ancient woodlands which are now conifer plantations. Other priority areas include the Kent Downs National Landscape and east of Canterbury City around Chequers Wood.

Trees are under increasing threat

Trees face increasing numbers of pests and diseases, including Ash dieback, and many others. They also face threats from climate change due to flooding, drought, high winds and extreme temperatures. Increasing genetic diversity of tree stock and the variety of species in woodlands is important to help trees to adapt to these threats. Management of woodlands can also help to make sure woodlands are more resilient.

There are opportunities to expand trees, woodlands and hedgerows, but this must be done in the right way

Expansion of trees, woodlands and hedgerows should be in keeping with the landscape and should not take place on sites which already have valuable habitats, for example flower-rich grasslands. Hedgerows are important features to connect to form wildlife corridors. Natural regeneration can be preferable to planting trees in many cases. If trees are planted, it is essential to choose the right tree for the right place and to make sure they are looked after following planting.

Trees, woodlands and hedgerows provide many benefits

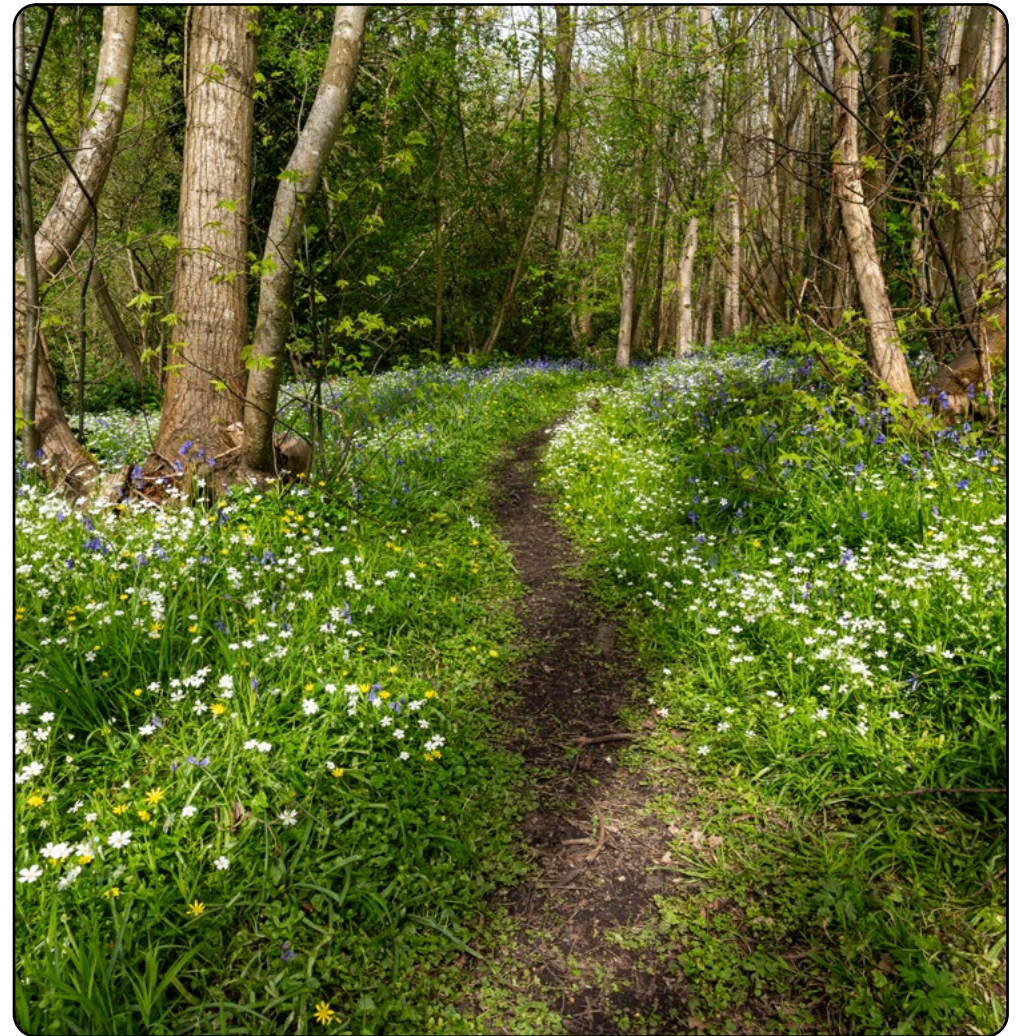
Trees store carbon, support biodiversity and pollinators, clean the soil and water and provide food, fuel and wood. They help create places which increase health and mental wellbeing. Trees are also important in urban areas, providing cooling, cleaning the air, supporting nature and making attractive places for people to live. Ensuring that developers provide more trees in new housing sites is important to create attractive places to live.

Scrub habitats are also important for wildlife, but we know less about them

Scrub is a transition phase between grassland and woodland. It provides shelter, food, and breeding areas for birds, insects, reptiles, amphibians and small mammals, bats and pollinator species. Certain types of scrub are important for one of our rarest birds, the Turtle Dove. However, we have less information on where there is scrub and the quantity of it as it often forms a part of other habitats.

Actions supporting woodlands, trees, hedgerows and scrub habitats and species

- BA3: Undertake a strategic review of landowners' and farmers' willingness to deliver biodiversity actions and present results in the form of a "Willingness Map."
- BA6: Work with the Wilder Blean Partnership (RSPB, KWT, FC, CCC and WT) to address habitat fragmentation and nature recovery through the delivery of 10 key schemes over the next five years.
- BA8: Support partnership opportunities for landscape-scale works within the Wantsum Channel, connections to The Blean and Pegwell Bay E3 initiative, and Canterbury to Coast.
- BA12: Promote the delivery of the 20 km long Canterbury Hedge and other tree planting initiatives across the district – seeking to plant and manage a minimum of 3 km of hedgerow in the next five years.
- BA14: Utilise the KMLNRS to identify and promote positive land management and the delivery of biodiversity outcomes at key landscapes and sites such as The Blean complex, Seasalter, the Wantsum Channel, Old Park, and Larkey Valley Woods.
- BA25: Consider potential for partnership led external funding strategies for key initiatives / sites including: (a) Old Park and Chequers Wood, (b) The Wantsum initiative, and c) Seasalter Levels.
- BA29: Enable the enforcement of best practice tree planting and maintenance on all development sites.



Ancient Woodland – Chequers Wood

Related actions in Canterbury City Council strategies

Green infrastructure strategy

- Retention and planting of trees on development sites.
- Protection and management of ancient woodlands
- Landscape-scale biodiversity: including woodlands – The Blean and East Kent Woodlands.
- Urban greening including street trees.
- Managing CCC owned land to maximise biodiversity.
- Improving biodiversity in and around Old Park.
- Sets out strategic green corridors along which to improve biodiversity, including trees and woodlands.
- Expand Duncan Down and protect Gorrell Wood.

Canterbury tree, woodland and hedgerow strategy

- Increase canopy cover across the district – in the form of woodlands, trees and hedgerows.
- Prioritise natural regeneration of trees.
- Increase street trees, including in new developments.
- Protecting existing trees, woodlands and hedgerows.
- Increase the length and quality of hedgerows.
- Measures to protect and respond to the threats to trees and woodlands from pests and diseases and the impacts of climate change.

- Woodlands in CCC ownership to be managed for wildlife, tree health and longevity.
- Provide information and support for communities and partners to develop and deliver projects around trees, woodlands and hedgerows.

Pollinator action plan

- Use of flowering trees to provide for pollinators.

Canterbury riverside strategy

- Trees along the riverbank can help to provide cooling to mitigate the effects of climate change.
- Native planting in some sections of the river as part of enhancements.
- Protection of scarce wet woodland along the river.

The coast and sea

From Graveney Marshes in the west, through to Reculver in the east, the coastline and offshore marine areas of Canterbury are incredibly special places for nature.

Large sections of the coast and sea are protected for nature. Offshore lies the Outer Thames Estuary Marine Protected Area, protected for supporting red-throated diver, common tern and little tern.

Closer inland are two Marine Conservation Zones (MCZ) – The Swale Estuary MCZ and the Thanet Coast MCZ. These are nationally designated sites to protect the diverse species they support in the variety of sediments and for their reefs.

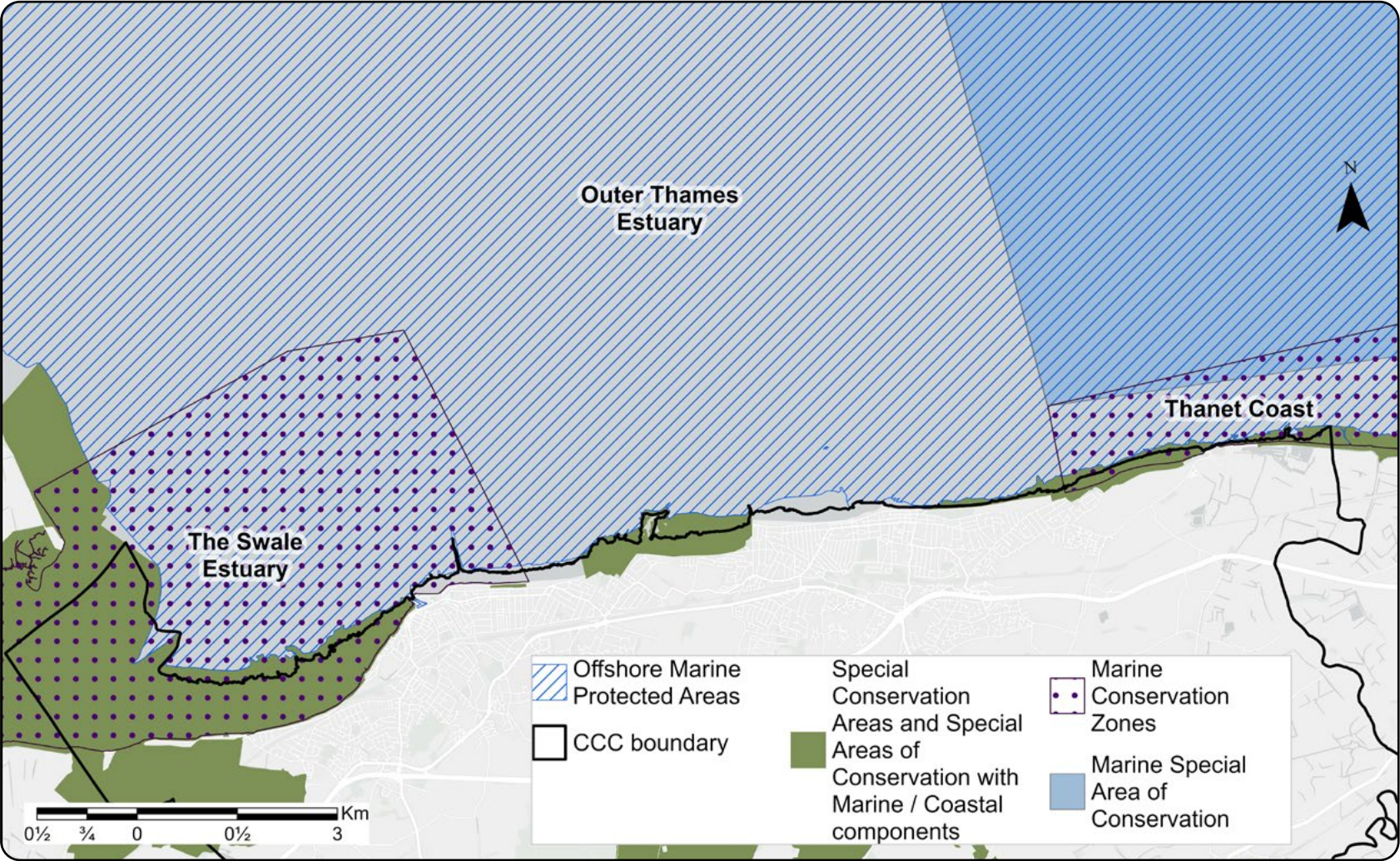
There are further inshore and land-based Special Protection Areas covering the eastern and western sections of the coast, designated for their international importance for overwintering birds. There is also a Special Area of Conservation - Tankerton Slopes and Swalecliffe – designated for the Fisher's Estuarine Moth which inhabits the coastal grassland.

Although large sections of the coast are developed there are very important areas for wildlife even near to urban areas, for example at Long Rock, Tankerton Slopes and Beltinge and Bishopstone Cliffs.

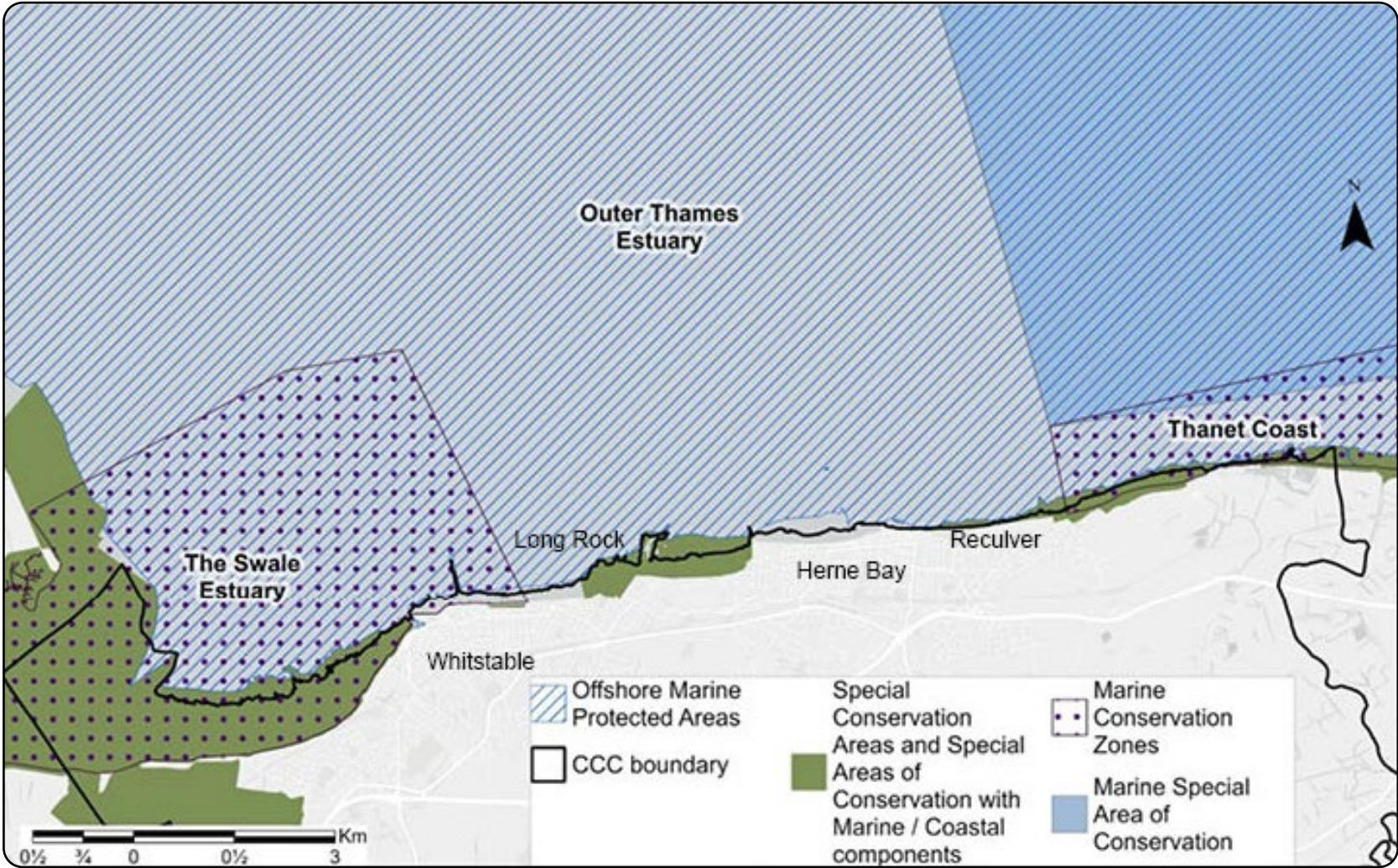


Seasalter mudflats

Plan 10: Coastal and marine protected areas



Plan 11: Coastal and marine habitats



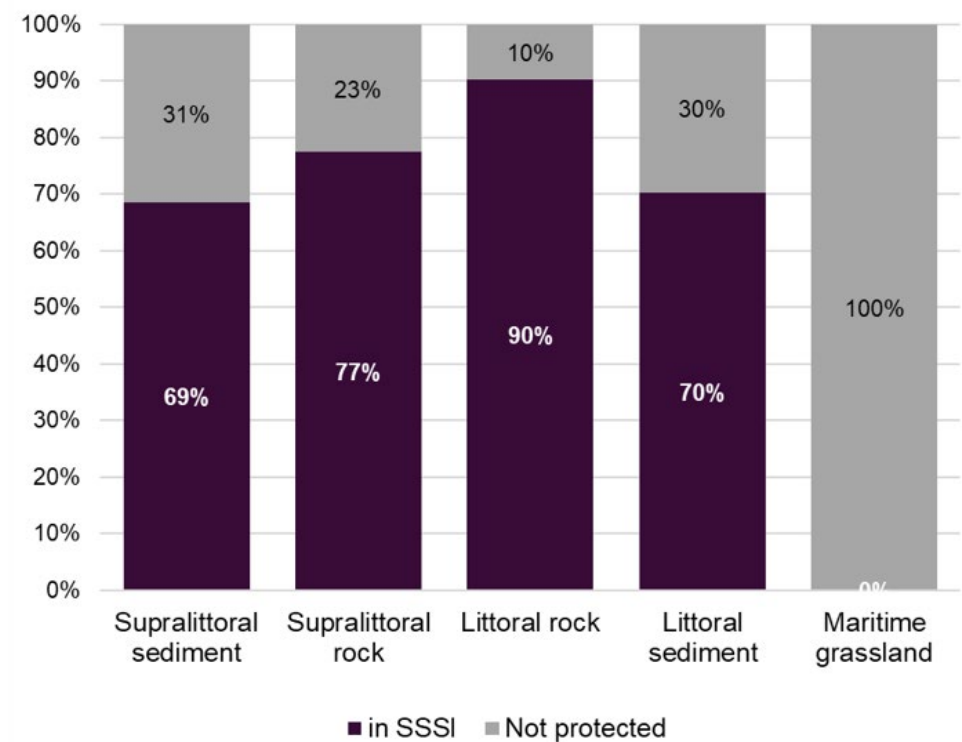
Summary of coastal habitats in Canterbury district¹⁵

Habitat	Hectares	% of Kent's habitat in Canterbury district	% of all Canterbury's coastal habitat which is of this type	% cover of whole district	% in Local Wildlife Site or Site of Special Scientific Interest
Supralittoral sediment*	40.3	1.6%	2.8%	0.1%	69%
Supralittoral rock*	4.6	2.1%	0.3%	0.0%	77%
Littoral rock#	67.2	9.3%	4.7%	0.2%	90%
Littoral sediment#	1310.0	10.9%	91.3%	3.9%	70%
Maritime grassland	12.6	37.9%	0.9%	0.0%	0%
Total	1389.8	-	100%	4%	-

* Supralittoral is above the high tide line and is not submerged by water

littoral is the shallow water which extends from the shoreline

Proportion of coastal habitats in Sites of Special Scientific Interest (no habitats are in Local wildlife sites)



Mudflats, beaches and sandbanks

The large areas of exposed mudflat at low tide are incredibly important feeding areas for overwintering birds. Much of the coastline is protected due to the high numbers of these birds. These birds feed during the winter on the north Kent coast ready for their spring migration north. If they are disturbed from feeding, for example by dogs being exercised on the beach, they may not gain enough weight for the journey to their breeding grounds. For this reason, the Bird Wise projects operate in Canterbury to raise awareness of the importance of not disturbing the birds.

Another important and threatened habitat is seagrass beds. These provide essential nursery grounds for fish, food for birds, and habitat for a range of invertebrates. They play a vital role in the health of marine habitats. Many seagrass species also help absorb and store carbon meaning they can also play an important role in tackling climate change. There remain some small areas of seagrass in the eastern end of the district.

There are also some very small areas of coastal vegetated shingle, but this is fairly limited in comparison with other areas of Kent. Nonetheless it is an important habitat which supports some very rare and specialised plants.



Oystercatchers are one of the birds which feed on exposed coastal mudflats

Long Rock (Swalecliffe) is a particularly interesting area and is internationally protected. This very small spit has both fresh and saline waters, with a range of very specialist plants and animals. It is also one of the locations of the incredibly rare Hog's Fennel, which supports the equally rare Fisher's estuarine moth. These species are found in only a handful of locations in Kent and Essex. This area is also popular for recreation, but this can be detrimental to the wildlife. A project has been implemented to help to prevent damage to the habitats and disturbance of birds.

Despite the coastline being protected by sea defences and therefore highly modified from its natural state, nature still finds a home on the boulders and armoury. Areas such as Hampton Pier, which was once set up to farm oysters, has now been reclaimed by nature and has some interesting and unique habitats.

The Transforming the Thames initiative is already leading marine bodies and local authorities on measures to plant Eel grass meadows.

Maritime cliffs

Bishopstone Cliffs to the eastern end of the district are sandstone cliffs, which as well as being important for wildlife, including nesting sandmartins, are significant for their fossils. The cliffs are highest to the east but there are sloping landward areas at Beltinge Cliff and The Downs east of Herne Bay, west of Hampton Pier and at Tankerton (Whitstable).

There are extensive areas of species rich coastal grasslands on the tops of the cliffs. In some of these areas is found Hog's Fennel and Fisher's Estuarine Moth as well as other coastal grassland species. Invasive plants such as blackthorn and Alexanders are out competing many grassland species to form monocultures. This needs to be reversed.

Offshore

There are reefs off the coast, particularly blue mussel beds off Whitstable. They are a complex habitat that provide food and shelter for many species.

The area is also renowned for its oysters – however, the once extensive beds of native oysters are severely threatened. The Pacific oyster, native to north-east Asia was introduced to the UK by the government in 1964 to offset the decline of the native oyster. It was believed they would not reproduce due to low sea temperatures. However, they are now breeding and are a problem on the Canterbury coastline, causing a threat to a range of native species including the blue mussels.



Bishopstone Cliffs

Our coast and sea species



Sand Martin

- **Coastal**
- The smallest of the martins, these birds breed in cliffs, returning each year from Africa.



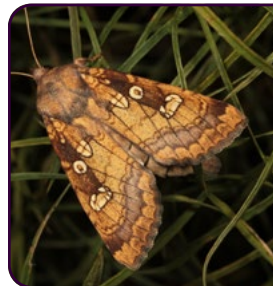
Hog's Fennel

- **Coastal grassland**
- A very rare coastal plant restricted to north Kent and only a few other places in the UK



Lapwing

- **Coastal and freshwater grazing marsh**
- A bird of wet grassland. Distinctive 'peewit' call. Forms large flocks.



Fisher's Estuarine Moth

- **Coastal grassland**
- A very rare moth, which feeds exclusively on the also very rare Hog's Fennel



Redshank

- **Coastal grazing marsh**
- A bird of marshes and mudflats. As its name indicates - it has red legs.



Eelgrass

- **Coastal grazing marsh**
- A sea grass that forms dense meadow beneath the sea and important habitat for rare species.

Threats and pressures on coast and sea

Climate change and sea level rise: Climate change will have a profound impact on coastal and marine habitats and species. These are particularly vulnerable. From increased erosion, loss of habitat, warming seas and changes in the distribution of species, the changes will be significant. Most of the coastline is hard engineered so coastal squeeze will be a considerable challenge to address in the district.

Pollution: Water flows from the Oyster Coast Brooks into the sea. The quality of the water has a direct impact on the habitats and species of the coast and sea. There are also sewage outfalls on this coastline. If there is too much sediment from watercourses or outfalls, this can cause smothering. If there are too many nutrients this can exacerbate algal blooms.

Non-native species: Non-native species can out-compete native wildlife. Some species may become more prevalent due to climate change. The Pacific oyster is a threat to marine life and there are others non-native species, including the slipper limpet and Manilla clam. Cord grass also out competes and displaces native vegetation, reducing food sources for native species. It also alters sediment composition impacting the distribution of invertebrate prey for birds and fish.

Recreational pressure: The coast is popular for recreation, all year round. This results in pressures on over-wintering birds particularly from dogs. Habitats and species can also be trampled. Activities on the water such as jet skiing can also be detrimental to wildlife.



Climate change sensitivity of coast and sea¹⁶

There is evidence that the seas around the UK are warming with a trend around 0.3°C per decade over the past 40 years. The sea level has also risen by around 12-16cm since 1900.

There is also evidence that there are more storms and an increase in wave height. This has an impact on coastal geomorphology and rates of erosion and accumulation of material along the coastline.

Sea level rise also results in 'coastal squeeze'. This happens where there is a hard structure along the coastline which means that any intertidal habitat can't retreat inland and is eroded. This is the case in Canterbury district.

Climate change is having a range of other effects on coastal and marine habitats and species. Seabirds are showing a decline across the UK, plankton species and communities are altering and the range of marine mammals is changing. All of these effects are changing the balance of ecosystems.

Finally, a warming climate can make conditions more favourable for invasive species such as the Pacific oyster, which is already a problem on the Canterbury coastline.

What our review of evidence has shown

Protecting important coastal habitats is not enough on its own

Canterbury's coast and sea support internationally-important habitats and species. The evidence shows that many of these habitats require active recovery and management, not just protection. Priority opportunities include recovering seagrass beds, native oyster and blue mussel populations, saltmarsh, vegetated shingle and maritime grassland. Recent local successes demonstrate that targeted action and partnership working can deliver significant benefits for biodiversity.

Active management is needed to maintain important grassland habitats

Some of the district's most valuable coastal habitats are being affected by invasive and dominant plant species. Coastal grasslands, which support rare species such as the Fisher's estuarine moth, require ongoing management to prevent species such as blackthorn from outcompeting specialist wildlife. Improving habitat condition through active management will be just as important as protecting sites from development.

The coast provides potential opportunities for education and engagement

The coastline is an ideal place to connect people with nature. Habitat recovery projects, citizen science, educational activities and community involvement can all help build support for biodiversity and encourage responsible use of the coast. Engaging local communities through initiatives such as school projects, volunteering and learning opportunities will be important in delivering long-term improvements for wildlife.

Partnership working will be essential

Many of the opportunities identified by the review will require collaboration between conservation organisations, coastal managers, local communities, researchers and the fishing industry. Partnership working will be critical to securing funding, sharing expertise and delivering biodiversity recovery across Canterbury's coast and marine environment.

Actions supporting the coast and sea

- BA9: Partner with Foreshore Services and the Zoological Society of London on the development and delivery of coastal and marine biodiversity projects, including Eel Grass meadow restoration at Seasalter, investigating the provision of artificial high tide roosts at Long Rock, and the placing of artificial micro reefs within the intertidal areas of Herne Bay.

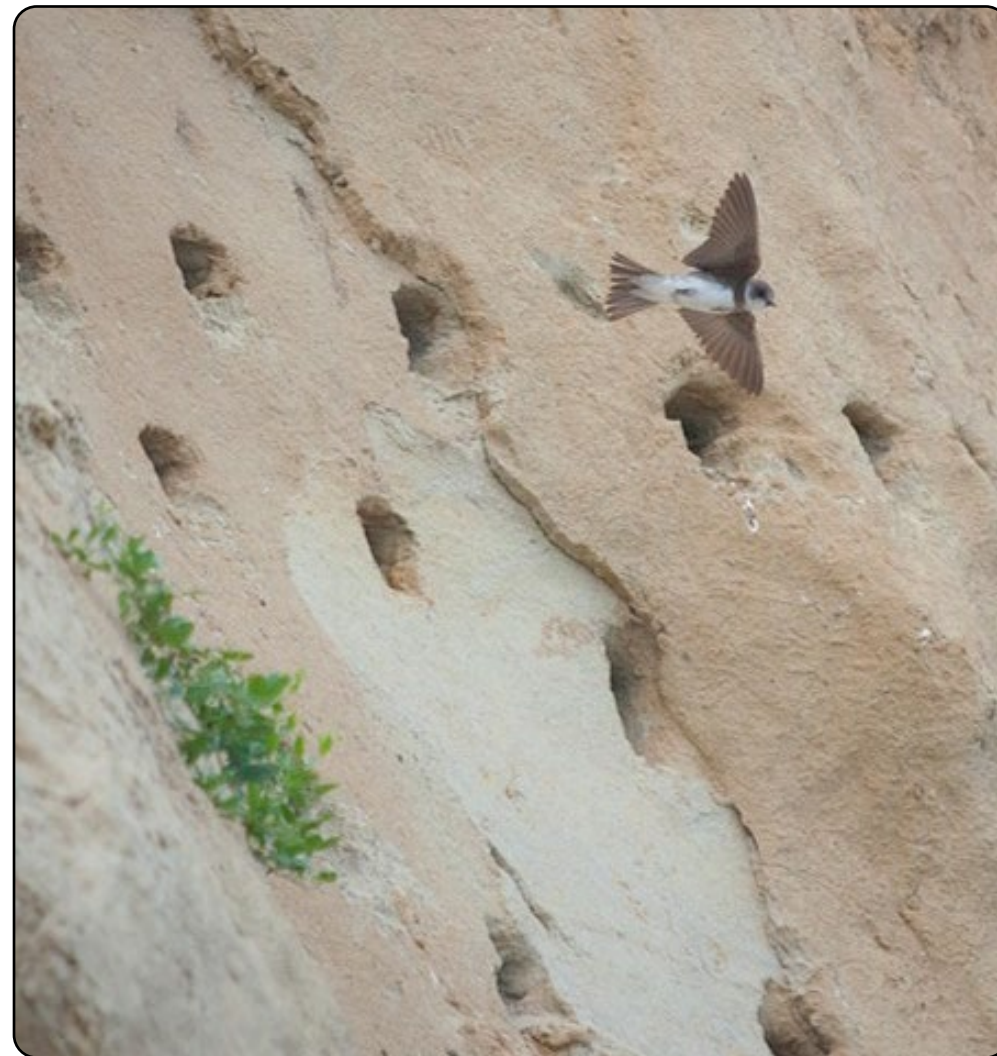
Related actions in Canterbury City Council strategies

Green infrastructure strategy

- Delivery of the Strategic Access Management and Monitoring strategy to protect coastal birds from recreational disturbance.
- Improvements to the Oyster Coast Brooks, which will reduce pollution entering the sea.
- Management measure at Long Rock to minimise negative recreational pressure.
- Measures to improve water quality inland, which has an impact on water flowing into the sea.

Pollinator action plan

- Supporting the rare pollinator species associated with coastal grassland, including the Fisher's Estuarine Moth and rare bumblebee species.



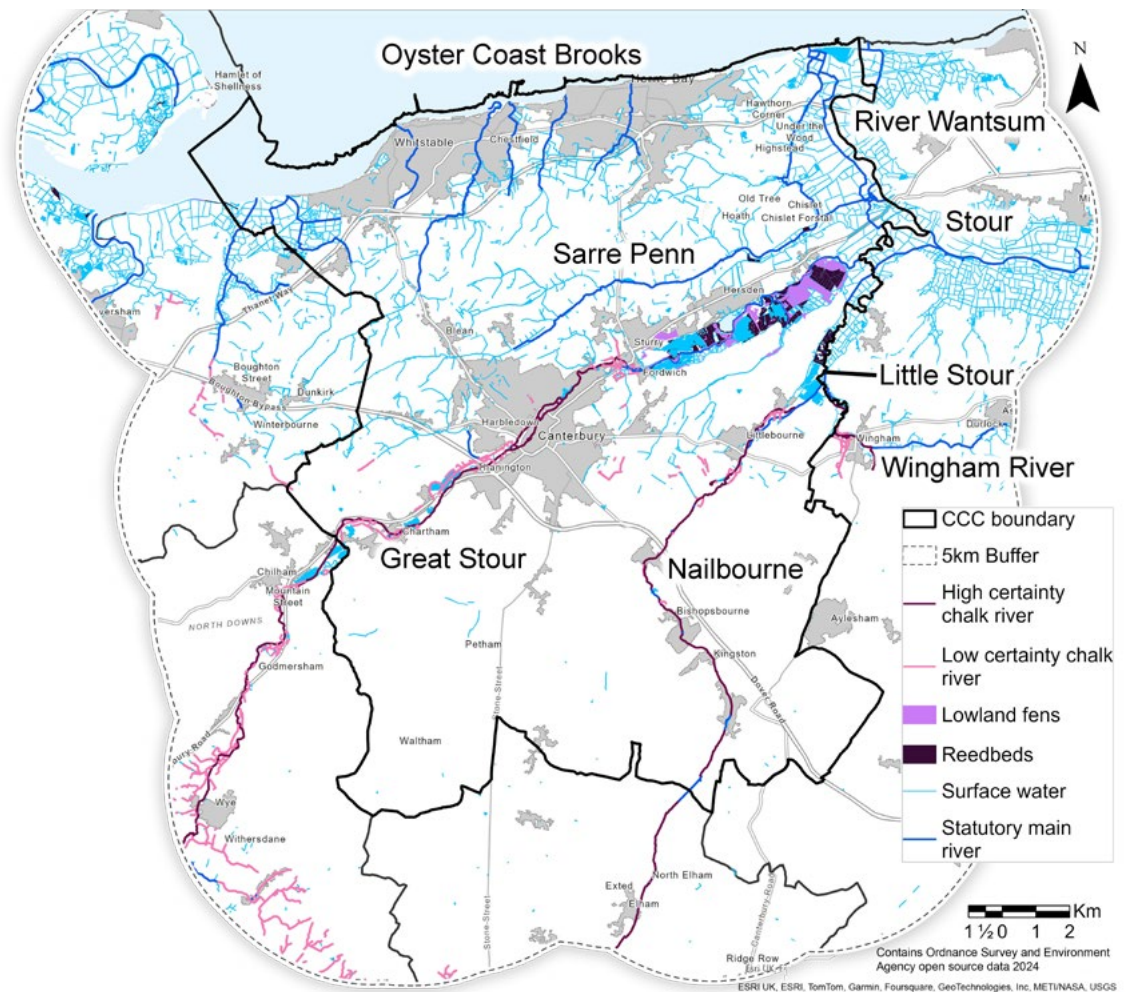
Sand Martin, Bishopstone Cliffs

Rivers, freshwaters and wetland habitats

The Great Stour is the largest river in the district. It flows through rural areas into Canterbury and then through Stodmarsh and Hacklinge Marshes. For part of its length, it is chalk river – one of several such watercourses in Canterbury district. Smaller watercourses flow into it – the Sarre Penn, Whitehall Dyke, Little Stour and Wingham River and the River Wantsum. On the coast there are a series of short watercourses, known collectively as the Oyster Coast Brooks, which flow from south to north. Several are now culverted and flow underground.

The complex of lakes, ponds, ditches and wetland habitats around Stodmarsh is internationally protected. This is the largest single group of wetland habitats, but there are other areas around the Little Stour and at Thanington and Chartham.

The Wantsum Channel, with the River Wantsum flowing through it, and the Seasalter Levels are expanses of low-lying wetland, with many drainage ditches, dykes, ponds and pools. There are fewer ponds and watercourses in the south of the district in the chalk downland areas due to the under-lying permeable chalk.

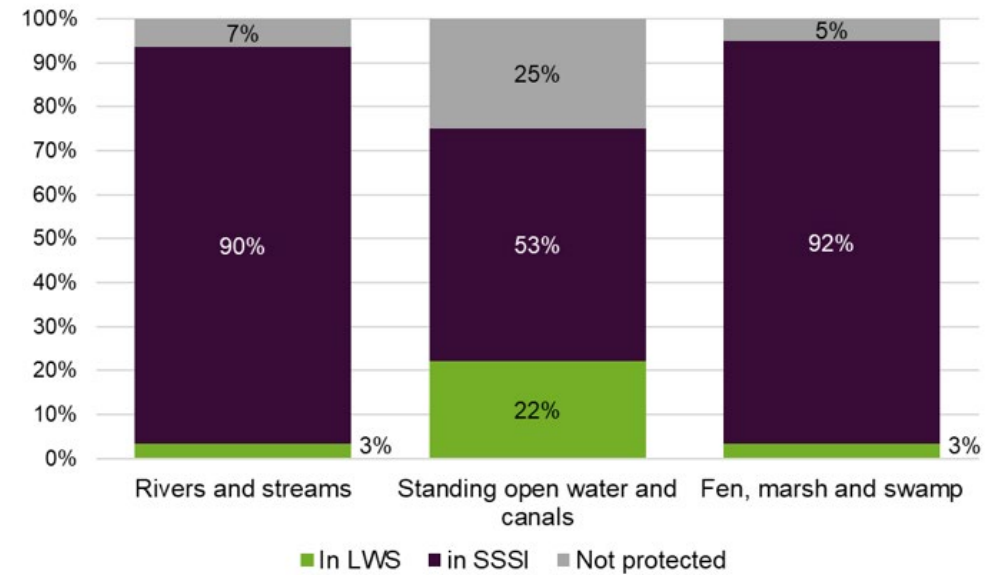


Plan 12: Rivers, freshwaters and wetland habitats

Summary of rivers, freshwaters and wetland habitats in Canterbury district¹⁷

Habitat	Hectares	% of Kent's habitat in Canterbury district	% of all Canterbury's grassland habitat which is of this type	% cover of whole district	% in Local Wildlife Site or Site of Special Scientific Interest
Rivers and streams	609.5	9.3%	49.5%	1.8%	3%
Standing open water and canals	370.8	8.0%	30.1%	1.1%	22%
Fen, marsh and swamp	250.0	27.5%	20.3%	0.7%	3%
Total	1230.3	-	100%	4%	-

Proportion of rivers, freshwaters and wetland habitats in local wildlife sites or Sites of Special Scientific Interest



Chalk rivers and streams

There are several chalk rivers and streams in the district. They are extremely rare with only an estimated 200 worldwide. They are mainly fed by underground water which means that the flow is more constant than other watercourses. The water is also very clear as it has been filtered by the chalk. This means they are particularly good for wildlife, including birds such as Kingfishers, fish including Brown Trout and eels, specialist plants such as Watercress and a host of aquatic insects.

Some of the rivers in the district show the typical characteristics of chalk watercourses – the Great Stour as far as Fordwich and the Nailbourne and the Little Stour. Others are classified as chalk streams but don't have typical characteristics, including the Whitehall Dyke west of Canterbury City and the Wingham River.

The Nailbourne is a particular type of chalk stream called a winterbourne. Winterbournes do not flow all the time and will appear at certain times – usually in the winter, when the water table is high enough.

Ponds and lakes

Ponds are important for a huge range of wildlife including birds, mammals, fish, amphibians and insects. Some live in ponds, some use them for food, shelter and to complete their lifecycles.



River Nailbourne in flood

Historically ponds were common on farmland and in villages as a water supply. However there has been a large decrease in ponds with an estimated 75% lost since 1945.¹⁸

It is not known how many ponds there are in Canterbury district or whether there has been any change in numbers in recent years. There are ponds mainly in the northern part of the district and especially in the Wantsum Channel, Seasalter Levels around Fordwich and Littlebourne and also across The Blean. There are fewer in the south of the district where the under-lying geology is chalk. In this area, dew ponds were created in the 18th and 19th centuries. These are human-created small ponds on top of chalky hills to provide water for grazing livestock.

There are also larger lakes in the district. These are concentrated around Stodmarsh and Littlebourne and Thanington and Chartham areas. These are often the result of human activity, for example collapsed colliery workings and gravel extraction.

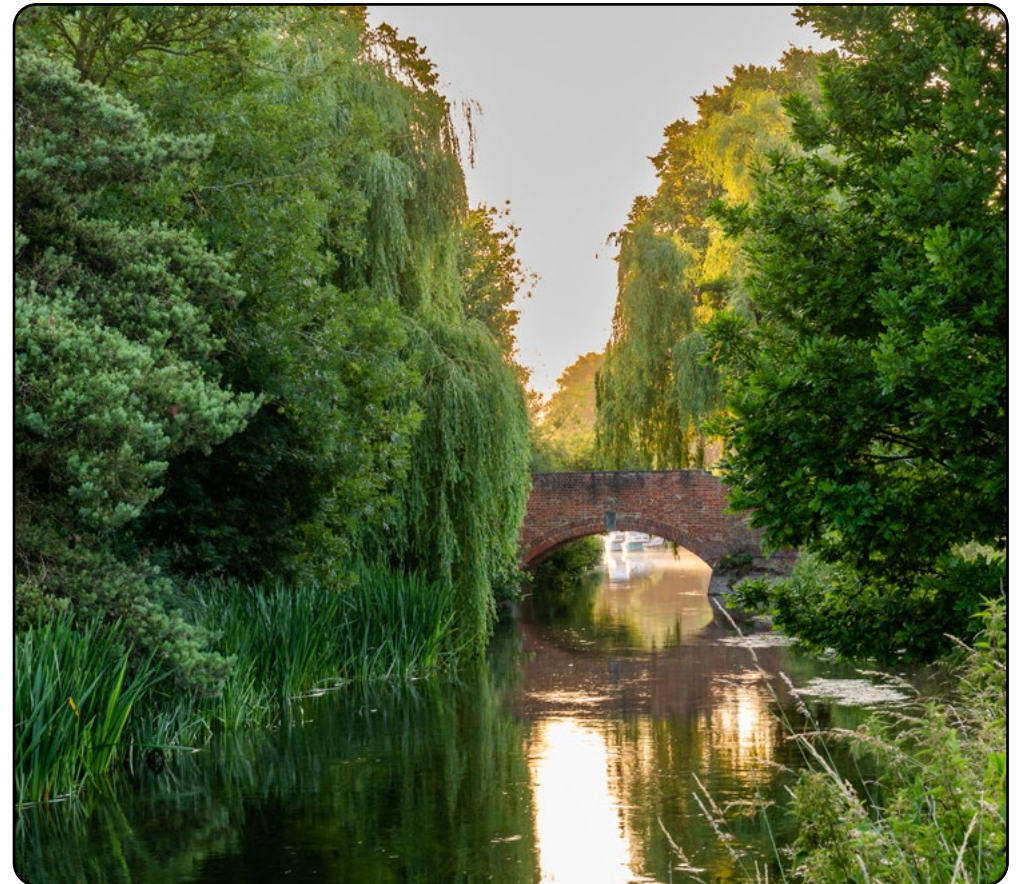
Reedbeds and fens

Reedbeds are wetlands that are dominated by common reed and where there is standing water for most of the year. They are usually found around lakes and pools but also on the edges of slow-moving rivers and streams and alongside ditches and marsh dykes. They support specialist species including Reed

Warbler, Bearded Tit, one of the UK's most threatened birds the Bittern and the nationally rare Water Vole.

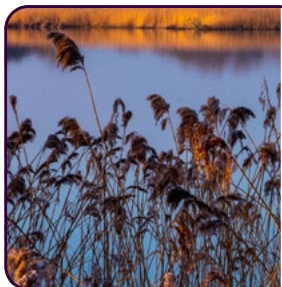
Canterbury district has one of the largest areas of this habitat, around Stodmarsh and along the River Stour. There are other smaller areas around the lakes at Littlebourne, along the Sarre Penn and at Seasalter Levels.

Fens are wetlands that form peat and occur on waterlogged, alkaline soils where the water table is at or very near the surface. It is a very rare habitat in Kent but there are areas within Stodmarsh, along with other wet grassland which has a unique range of species.



River Stour, Fordwich

Our rivers, freshwaters and wetland species



Reedbeds

- **Wetlands**
- Reedbeds are home to a range of species - they support food and birds, insects and fish and provide places for water voles to burrow



Water Vole



- **Wetlands**
- These mammals are found in a range of wetland habitats but are under threat



Lapwing



- **Coastal and freshwater grazing marsh**
- A bird of wet grassland. Distinctive 'peewit' call. Forms large flocks.



Reptiles and Amphibians

- **Wetlands**
- All wetland habitats are important for amphibians and some reptiles, which use them at different phases in their life.



Beaver

- **Rivers**
- Mammal found along the Stour river. Beaver dam building helps slow water flow.



Desmoulin's Whorl Snail

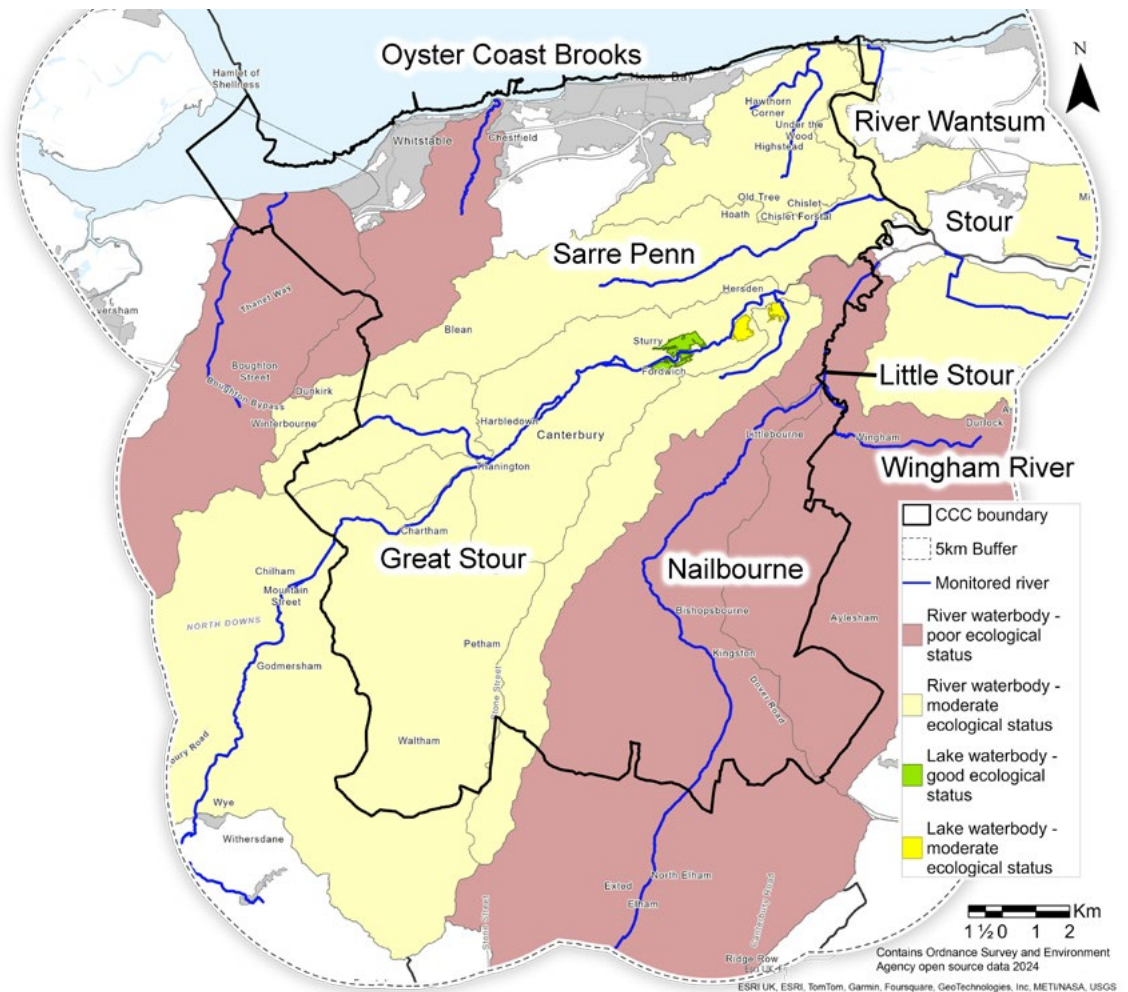
- **Wetlands**
- A rare snail found in Stodmarsh

Threats and pressures on rivers, freshwaters and wetland habitats

The following threats and pressures cause the loss or reduction in the nature conservation value of these habitats. Environment Agency data gives information on these threats and pressures within the district. The State of Nature in Kent Report gives information relevant to Kent; however, information on the extent and impact within Canterbury district is incomplete.

Plan 13 gives an overview of the ecological status of waterbodies which are monitored by the Environment Agency. Only one waterbody, Fordwich Lake is in good ecological condition and none of the river waterbodies are in good ecological condition. The main reasons are detailed below.

Water abstraction: East Kent is one of the driest places in the country. Groundwater not only supplies water for human consumption, but it also feeds the chalk rivers and streams. Abstraction of water for public, commercial and farming use, from groundwater and watercourses, has a direct effect on quality for wildlife and can lead to low flows in watercourses.



Plan 13: Ecological condition of Waterbodies

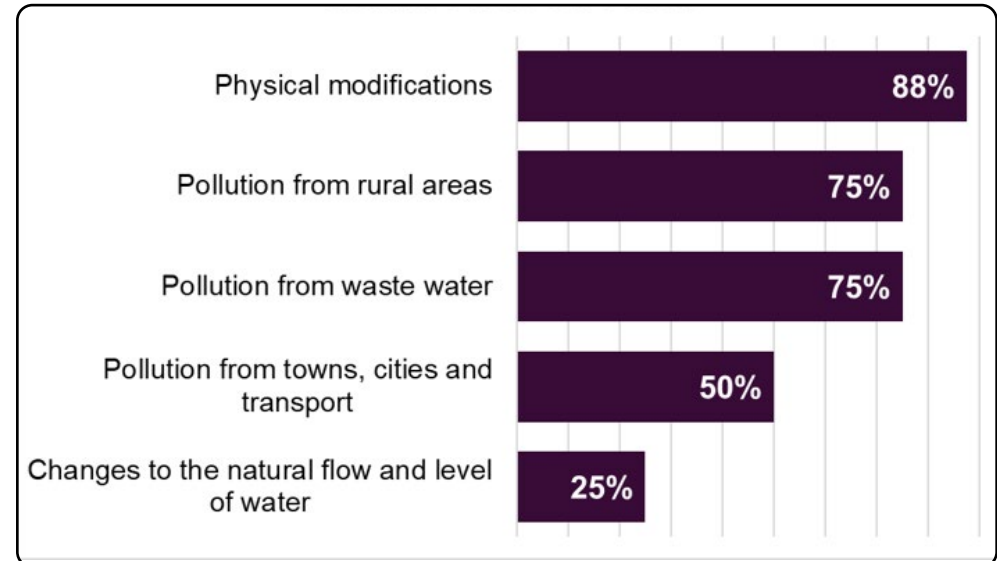
Hard engineering and structures on watercourses: Many watercourses in the district have been modified, culverted, have structures on them or have been engineered in other ways. In some cases, such as the Oyster Coast Brooks, the original watercourse is now completely underground. Hard edges and culverting reduce the wildlife value of the watercourse. Structures, such as weirs and dams obstruct fish migration and is a factor in low fish populations in the catchment.

High levels of nutrients: Phosphates in particular are high across the catchment, but nitrates can also be high. Water industry discharges are the biggest contributor to phosphorus in waterbodies. Although sewage is treated the final effluent can still contain levels of phosphorus that can be detrimental to the environment. In addition, permitted overflows after storms may mean that untreated wastewater enters the watercourse. Diffuse pollution comes from agriculture due to the runoff from fields. Private septic tanks can also result in pollution. An excess of nutrients causes eutrophication, which causes an excess in plant growth, including sometimes dangerous algal blooms, and a decrease in oxygen from reduced light and decomposing plants. This has a very detrimental effect on the wildlife of the waterbody, which the Stour Environmental Credits scheme is seeking to address.

Other pollutants: Other pollutants are present in the waterbodies in the district. Although sometimes in small amounts, some of these are harmful to aquatic life and can increase in concentration as they move up the food chain.

Reasons for river waterbodies in Canterbury district not reaching good ecological status (eight river waterbodies)

Reasons for river waterbodies in Canterbury district not reaching good ecological status (eight river waterbodies)



Invasive non-native species: Pond habitats, but not exclusively, are also affected by aquatic invasive non-native flora, such as Australian Swamp Stonecrop, New Zealand Pigmyweed, and Parrot's Feather. These plants out-compete native species and can be very prolific, especially where there are also increased nutrients.

Direct loss: Ponds and wetlands can be filled in or be lost due to silting up or land can be drained for farming or development.

Climate change sensitivity of rivers, freshwaters and wetland habitats ¹⁹		Rivers and streams	Standing water	Reedbeds	Fens
	Overall climate change sensitivity	High	High	Medium	High
Cause	Potential impacts				
Hotter summers	Increased water temperature affecting the abundance of some species. Decline in cool-water species.	✓		✓	
	Changes in the timing of the seasons could affect individual species and consequently whole food webs.	✓	✓	✓	✓
	Low flows or reduced water levels reducing extent or causing temporary loss of habitat, leading to increased competition, unfavourable conditions for fish and other species and increases in eutrophication for some habitats.	✓	✓		
Drier summers	Drying out of the habitat leading to loss of species and dominance by species which prefer drier conditions and loss of species which depend on this habitat.			✓	✓
	Increased abstraction of water will put habitat under even greater stress.	✓			
	Greater abundance of non-native invasive species.	✓	✓	✓	✓
Wetter and warmer winters	Increase nutrient loading having impacts on species and habitats. Increased silting and sediment.	✓	✓	✓	✓
	More flooding making it more difficult to manage sites.			✓	✓
	Increased connectivity between sites means that floods can increase spread of non-native species.	✓			
Sea level rise	Saline intrusion for sites near the coast.		✓	✓	✓

What our review of evidence has shown

Poor ecological status of waterbodies and scarcity of water are significant concerns in the district.

Most waterbodies – rivers and standing waters – are in poor ecological condition. There are many factors contributing to this. The main reasons are physical modifications and pollution from rural land and wastewater treatment. Most of these are not entirely within the control of Canterbury City Council, but the council can support others in taking action to improve water quality. Actions within the Canterbury Tree, Woodland and Hedgerow Strategy and the Green Infrastructure Strategy can support reducing runoff from agricultural land.

Stodmarsh is an area of particular concern in relation to increased nutrients.

In 2020 Natural England, the government's nature conservation advisor, advised local planning authorities that new development must not increase the level of nutrients nitrogen and phosphorus in the River Stour as they are having a negative impact on Stodmarsh National Nature Reserve. The council is working with partners to develop a catchment wide strategy to deliver mitigation for the impacts of planned development affecting water quality at Stodmarsh. This includes a sequential approach to embedding mitigation within development sites, such as through new high quality wastewater treatment facilities, along with developing wetlands which can remove harmful nutrients from the watercourses which feed into Stodmarsh.

There is a need for greater awareness of the impact of water use on the natural environment.

Greater awareness of the connection between everyday use of water and the impact on water scarcity and pollution can help to improve water quality and quantity and support nature. Wasteful consumption can further stress aquifers, which can lead to low flows in chalk rivers. Thoughtless disposal of chemicals down the drain can lead to pollution. Disposal of invasive pond plants or other species can have a very detrimental impact on nature. Conversely, small changes in behaviour by very many people can help to improve the water environment. There are also opportunities for communities to take positive action to support their local streams, rivers and ponds through clean-ups and positive improvement projects.

Working in partnership is needed to deliver projects which improve the water environment.

The water environment is very inter-connected with many organisations responsible for water quality and supply and many land uses having an impact. Working at a landscape-scale and with partners can deliver particular benefits. Water environments operate at the scale of catchments and rivers and streams are quite obviously connected. Projects such as removing barriers to fish can help them to move along far greater lengths of the river. Projects to improve the River Stour corridor through the district have been underway for several years and are continuing through the Canterbury Riverside Strategy with a Regional Park being explored. A project to work at a landscape-scale around the River Wantsum is also included in this strategy.

Actions supporting rivers, freshwater and wetland habitats

- BA7: Work in partnership to deliver the Stour Valley Restore initiative, promote biodiversity opportunities along the Great River Stour at Wincheap Meadows, Bingley Island and Fordwich Meadows, and explore the Broad Oak Reservoir biodiversity gain and the establishment of a Great Stour Regional Park.
- BA8: Support partnership opportunities for landscape-scale works within the Wantsum Channel, connections to The Blean and Pegwell Bay E3 initiative, and Canterbury to Coast.
- BA11: In association with the Rights of Rivers initiative, develop initiatives promoting the improved condition of the district's waterways and ensuring nutrient neutrality, including working with Natural England to support their restoration of Stodmarsh.
- BA20: Work with the Canterbury Riverside Group to deliver the Canterbury Riverside Strategy.
- BA25: Consider potential for partnership led external funding strategies for key initiatives / sites including: (a) Old Park and Chequers Wood, (b) The Wantsum initiative, and c) Seasalter Levels.

Related actions in Canterbury City Council strategies

Green infrastructure strategy

- Improvements to the Oyster Coast Brooks watercourses in Whitstable and Herne Bay, including community engagement.
- Measures to reduce industrial and domestic water consumption and to improve water quality.
- Utilise Sustainable Drainage Schemes (SuDS).
- Support measures to improve water resources in all catchments, encouraging communities to take an active role.
- Enhance biodiversity in the Wantsum Channel and River Stour corridor, including across local authority boundaries.
- Fish passage and water quality improvements along the Little Stour and Great Stour.

Canterbury tree, woodland and hedgerow strategy

- Conservation and expansion of wet woodland, a rare habitat.
- Environment Agency data used to show where trees could reduce flood risk and where riparian trees may be beneficial.
- Pollinator Action Plan
- Water habitats important in life stages of some pollinators.
- Action to improve wildlife along the River Stour.

Canterbury riverside strategy

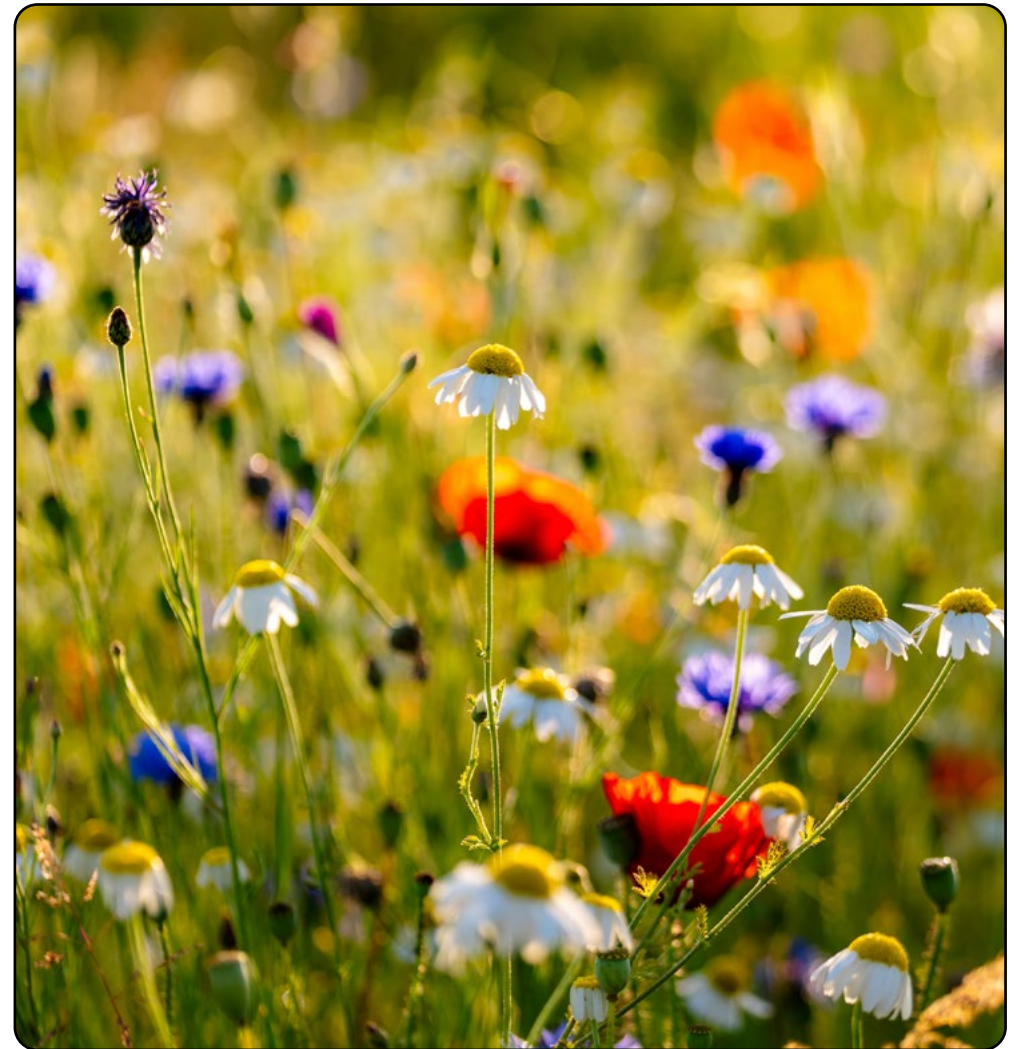
- Protection of scarce wet woodland along the river which can help to provide cooling to mitigate climate change effects.
- Protection and improvement of wildlife habitats – both within the river and along the banks.
- Removal of barriers to fish passage.

Urban nature

Although human urbanisation has a largely negative effect on nature it can, and does, coexist with us in urban areas.

The Office for National Statistics recorded that in 2022, 13% of the Canterbury district was in 'built up areas'. This includes the entirety of urban areas, including villages, that are 'irreversibly' urban in character. However, within this urban fabric there are many green areas. Kent County Council estimates that 6.8% of the district's undeveloped land is domestic gardens, rather than actual buildings. There also remain many other areas which support nature. These include parks, amenity greenspaces, allotments, churchyards and cemeteries, sports areas and school grounds. Nature is not always considered in their management and more can be done to improve wildlife in the district's urban areas.

Restoring nature in wilder urban areas also has the benefit of allowing those who live there – most of the population of the district – to access and enjoy nature for health and mental wellbeing. Nature also provides other benefits for residents, especially through trees, woodlands and hedgerows, which can help to clean the air, regulate temperature and minimise flooding.



Kingsmead Playing Field, City of Canterbury

It is a feature of Canterbury district's urban areas that there are high quality nature habitats immediately on their outskirts. This makes the interface between town and countryside particularly important.

In the case of Wilder Whitstable and Wilder Herne Bay, the internationally important coast and marine environment lies to the north and The Blean woodland to the south.

In Wilder Canterbury City, The Blean lies directly to the north. The River Stour corridor runs through the city and, although this has been modified by human activity, it still forms a very important area for wildlife. On the eastern side of the city, Chequer's Wood and Old Park Sites of Special Scientific Interest form the end of an important blue-green nature corridor which continues to the east to internationally important Stodmarsh.



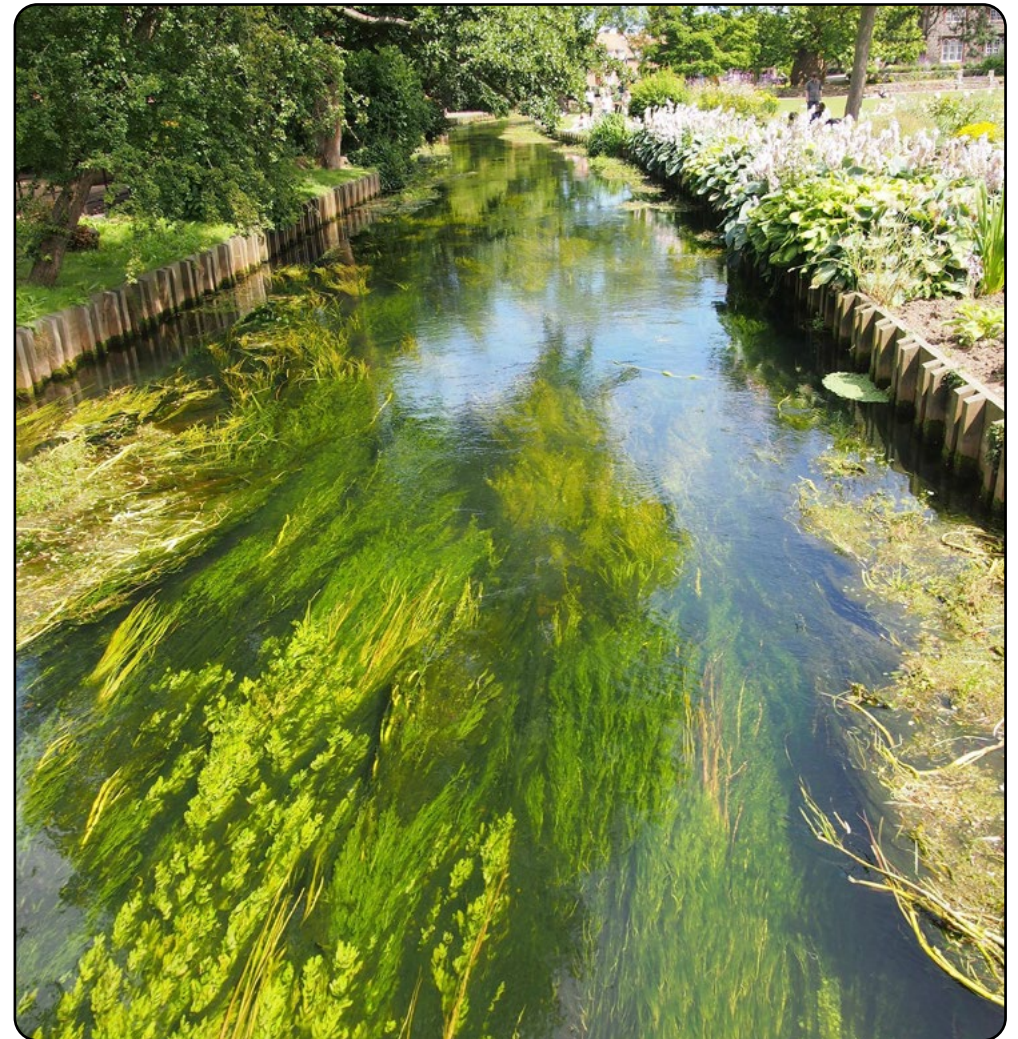
Canterbury High School. Gardens, allotments, pitches and transport corridors all provide potential for nature.

Green and blue infrastructure planning has an important role in ensuring that biodiversity is enhanced. Opportunities include green walls and roofs, better management for nature and increases in urban greenspace, naturalising road verges, more street trees and use of Sustainable Drainage Systems (SuDS).

Canterbury district's adopted Green Infrastructure Strategy sets out corridors and actions in all the district's three main urban areas. Communities taking action and everyone playing their part, including in domestic gardens, is highlighted in the strategy.

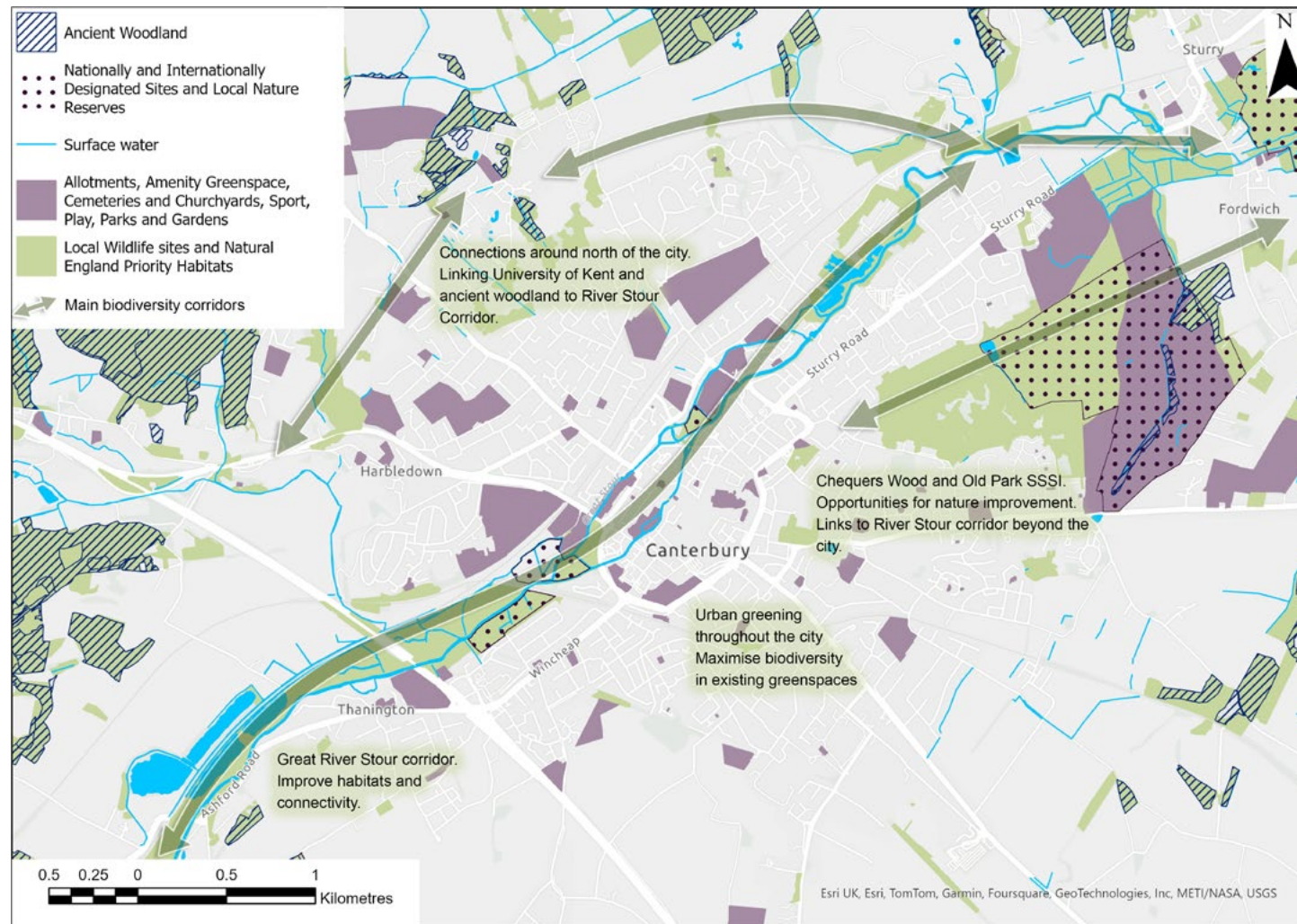
Brownfield land

Brownfield land is land that was previously developed but which is no longer in use. These sites are also a priority area for redevelopment under planning law to reduce the amount of other land which is lost to development. Brownfield land is a Kent Nature Partnership priority habitat as, in some cases, brownfield land supports rare and specialist species. This is particularly the case where the site has been undeveloped for a long period of time and nature has established, and not all brownfield sites support wildlife. Canterbury City Council keeps a register of brownfield sites.

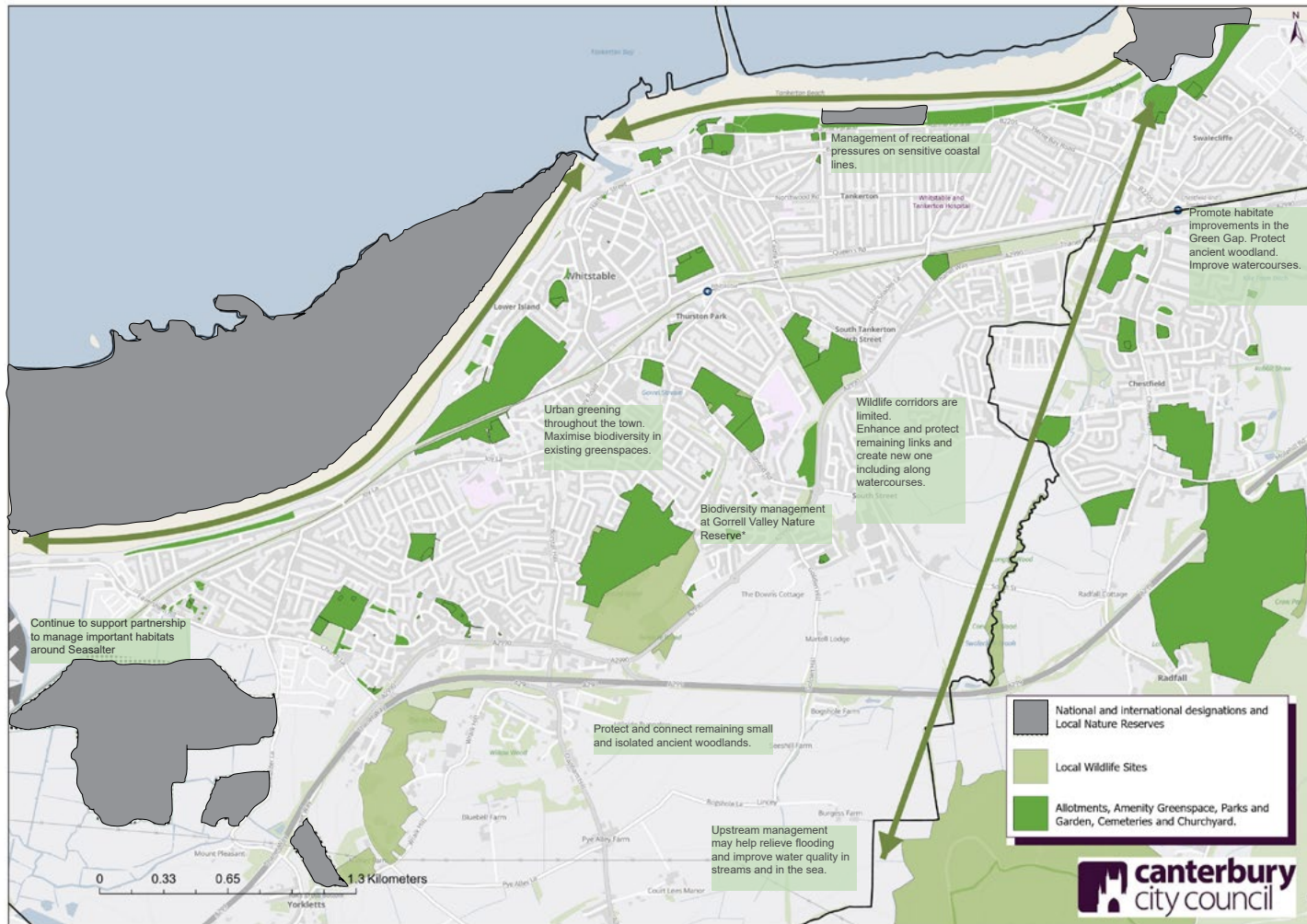


Westgate Gardens, City of Canterbury

Plan 14: Canterbury City biodiversity corridors – adapted from Canterbury district green infrastructure strategy



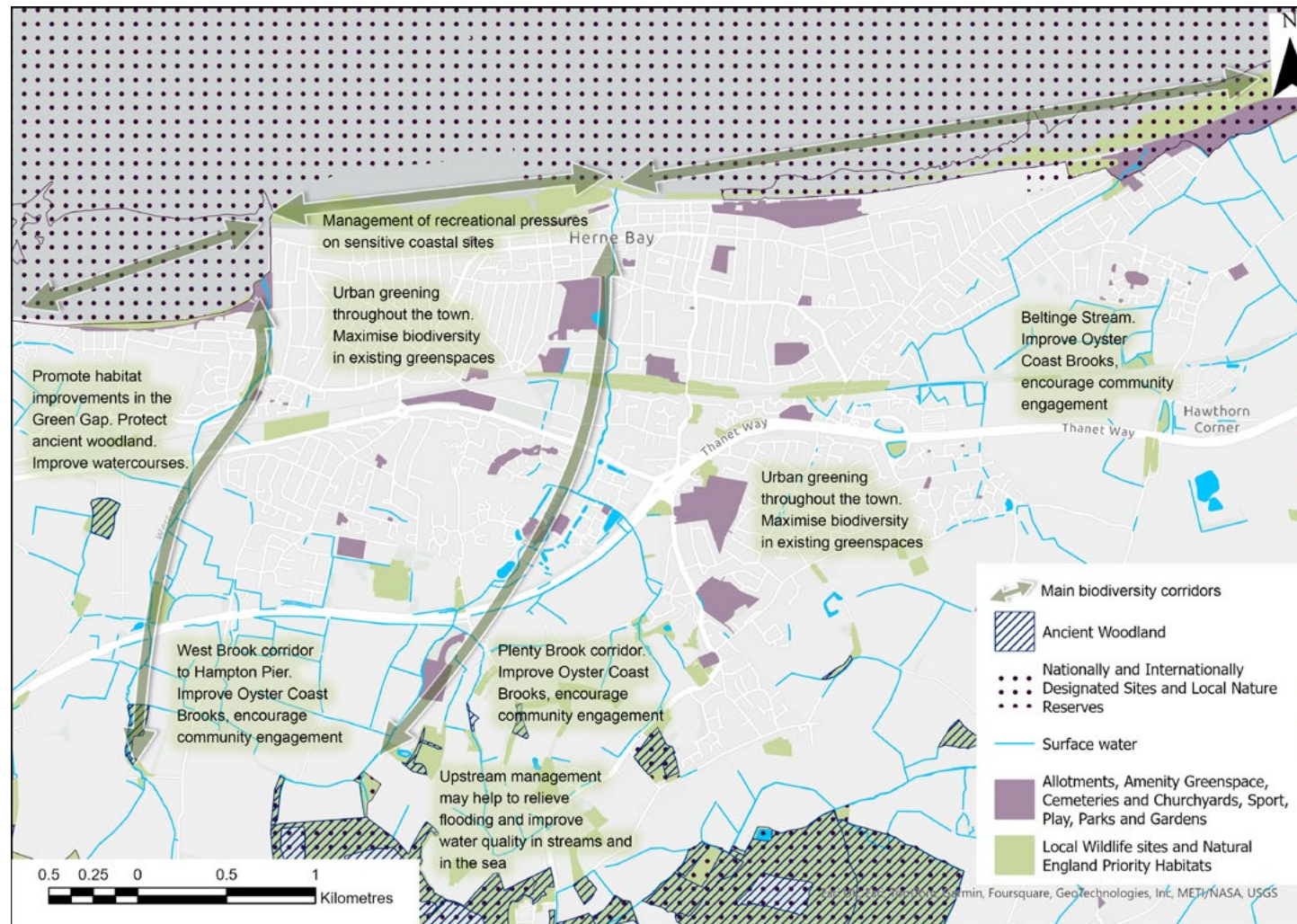
Plan 15: Whitstable biodiversity corridors – adapted from Canterbury district green infrastructure strategy



*Gorrell Valley Nature Reserve is Amenity Greenspace in its entirety, however to show its LWS status, only half is shaded the darker green. Map layers are being updated.

Map layers used for these plans are being updated. The Canterbury and Herne Bay plans will be updated in due course to look similar to Whitstable's.

Plan 16: Herne Bay biodiversity corridors – adapted from Canterbury district green infrastructure strategy



Our urban species



Swift

- **Urban buildings**
- Swifts spend their lives in flight, catching small insects. They nest in buildings and new houses can support swifts through swift boxes.



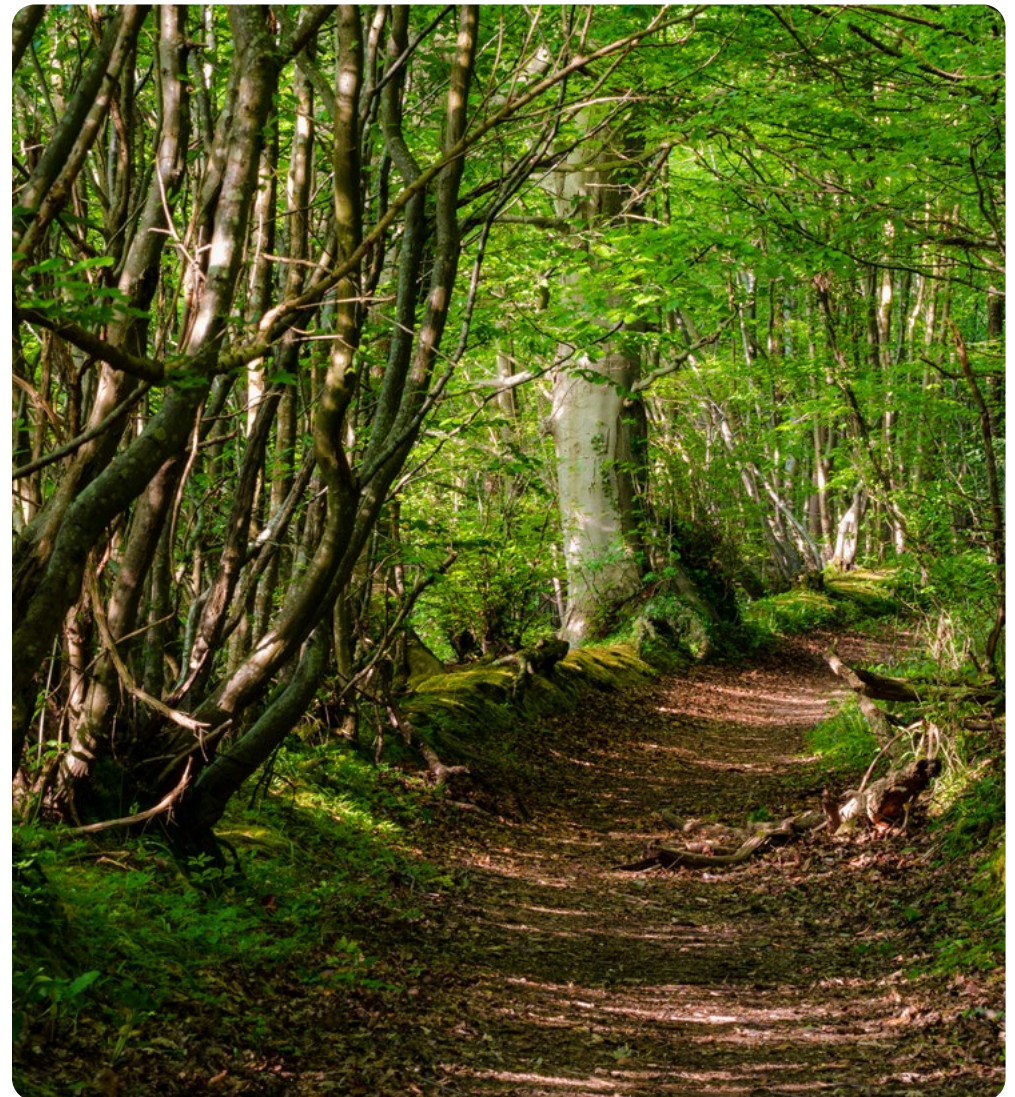
Shrill Carder Bee

- **Urban and coastal grassland**
- A very rare bumblebee only found in a few places in the UK



Reptiles and Amphibians

- **Allotments and Gardens**
- Grass snakes are often found in urban areas, especially where there is water nearby.



Threats and pressures on urban nature

Urban sites are more vulnerable: Urban sites are smaller and not always well-connected. This makes them more vulnerable to direct loss, damage, pests and diseases and climate change impacts. Many species cannot move across the hostile urban environment between sites.

Direct loss: In urban areas, the remaining small areas are under threat of being lost to development, or through changes to management, for example paving over front lawns for parking.

Making changes at scale is difficult: Most urban sites are small and to make meaningful improvement for nature requires co-ordination between many landowners.

Negative urban impacts: Invasive species can be an issue in urban habitats – sometimes these are deliberately planted from gardens or have simply escaped. Litter and antisocial behaviour such as fires can also have a negative impact. High levels of recreation can also disturb wildlife.

Green spaces not managed for nature: Many greenspaces are not managed with nature in mind. There is more that can be achieved on sports pitches, in schools and on road verges, as well as in gardens. There is also sometimes a perception that management for nature is neglect or looks untidy. This needs to be challenged and management for nature to become the new norm.

Climate change sensitivity of urban nature

Urban temperatures are approximately 1.24°C hotter than previous decades. The impact of this on residents living in urban towns and cities by 2050, is that hotter drier summers and warmer wetter winters will significantly increase and affect urban nature.

Increasing summer dry spells and erratic rainfall are already reducing water supply and causing low river flows and pond levels, reduced oxygen concentrations, and more stress on species and habitats. The dry spells are creating tougher conditions for planted trees and increases in failure rates.

Increased urban heat and population density will raise demand for shade and cooling, requiring resilient, drought-tolerant tree species capable of withstanding prolonged soil moisture deficits and higher temperatures.

Wetter winters will increase the frequency of waterlogging and flooding in urban areas, placing more stress on trees and green infrastructure, reducing soil health, and disrupting habitats.

What our review of evidence has shown

Effective water management will be increasingly critical.

As climate change leads to more frequent dry conditions alongside increased surface water flooding and winter waterlogging, there is a growing need to integrate nature-based solutions into urban design. Measures such as Sustainable Drainage Systems (SuDS), permeable surfaces, rain gardens and enhanced green and blue infrastructure can help regulate water flows, reduce flood risk and improve water quality. Strengthening river corridors, increasing tree planting, and designing spaces to hold and slowly release water will be essential to improving the resilience of both urban habitats and communities.

Nature has multiple benefits for people.

Increasing tree canopy cover and access to high-quality green space can help to cool urban areas, improve air quality, and deliver significant physical and mental health benefits. However, this provision is currently uneven across the district. The Canterbury Tree, Woodland and Hedgerow Strategy identifies wards with lower-than-average tree cover, many of which also experience higher levels of social deprivation. Addressing these inequalities should be a priority through targeted investment in tree planting and green infrastructure, ensuring that the benefits of urban nature are accessible to all communities.

There is a unique opportunity in urban areas to educate, engage and connect communities with the natural environment.

Urban areas provide an accessible setting for people to experience and support nature. The evidence shows that meaningful improvements will depend on local participation, beginning with wildlife-friendly actions in domestic gardens and extending to shared spaces such as allotments, churchyards, school grounds and parks. Supporting communities to adopt wildlife-friendly management practices can deliver cumulative benefits at scale and help establish a stronger culture of stewardship for nature.

Working with communities is needed to keep pressure on developers.

Engaging communities can help keep pressure on developers to deliver green infrastructure and biodiversity in new development. There is a need for stronger and more consistent requirements on developers to incorporate biodiversity, tree planting and long-term management into schemes. The council is already assessing open space provision in planning applications and working to improve tree establishment and maintenance. Strengthening partnership working with developers, supported by clear standards and effective enforcement and monitoring, will be essential to securing positive outcomes for urban nature.

Actions supporting urban nature

- BA7: Work in partnership to deliver the Stour Valley Restore initiative, promote biodiversity opportunities along the Great River Stour at Wincheap Meadows, Bingley Island and Fordwich Meadows, and explore the Broad Oak Reservoir biodiversity gain and the establishment of a Great Stour Regional Park.
- BA10: Liaise with Highways England and other highway authorities to promote the management of the transport network, walking and cycling and public rights of way for habitat conservation, including the opportunity for green bridges.
- BA12: Promote the delivery of the 20 km long Canterbury Hedge and other tree planting initiatives across the district – seeking to plant and manage a minimum of 3 km of hedgerow in the next five years.
- BA14: Utilise the KMLNRS to identify and promote positive land management and the delivery of biodiversity outcomes at key landscapes and sites such as The Blean complex, Seasalter, the Wantsum Channel, Old Park, and Larkey Valley Woods.
- BA17: Support Contracts and CANENCO's delivery of biodiversity positive grounds maintenance through provision of training and increased awareness.
- BA19: Targeting schools, universities and parish council's, to promote applications to the CCC Biodiversity Grants management of / Biodiversity initiatives.
- BA20: Work with the Canterbury Riverside Group to deliver the Canterbury Riverside Strategy.
- BA21: Continue to support and advise Friends of Groups across the district and establish new groups where there is demonstrable need and/ or demand.
- BA25: Consider potential for partnership led external funding strategies for key initiatives / sites including: (a) Old Park and Chequers Wood, (b) The Wantsum initiative, and c) Seasalter Levels.
- BA26: Review the management of land owned by the council, the universities, schools, Housing Revenue Account, MoD, and hospitals, and promote biodiversity measures such as pollinators.
- BA28: Review provision of Local Nature Reserves in relation to growing population. Complete audit and then prioritise action. Consider focusing on unprotected chalk grassland.
- BA29: Enable the enforcement of best practice tree planting and maintenance on all development sites
- BA30: Reference KMLNRS in the provision of SuDS and semi natural open space, and delivery of 20% canopy cover and 20% BNG, making maximum use of the opportunity to strengthen habitat connectivity in pre-application and planning decisions.
- BA31: Consider adaptive measures (species selection, land management / use etc.) to mitigate against the impacts of climate change and embark on initiatives to achieve Wilder Canterbury City, Wilder Whitstable and Wilder Herne Bay.

Related actions in Canterbury City Council strategies

Green infrastructure strategy

- Sets out wildlife corridors in urban areas.
- Develop urban greening projects in all three urban areas – including on green space sites not owned by the council, including playing fields, school grounds, industrial and commercial sites, road verges, street trees and pedestrian and cycling routes, working with communities to do so.
- Adapting Canterbury City Council's ground maintenance regime to support nature.
- Linking urban to countryside.
- Delivering new greenspaces.
- Improving biodiversity in and around Old Park.
- New development should retain and provide nature habitat, including trees.
- Improvements to the Oyster Coast Brooks watercourses in Whitstable and Herne Bay, including community engagement.
- Utilise Sustainable Drainage Schemes (SuDS).
- Fish passage and water quality improvements along the River Great Stour.

Canterbury tree, woodland and hedgerow strategy

- Increasing street trees.
- Encouraging tree planting in urban locations such as school grounds, sports areas, business premises, parks and domestic gardens, where this is appropriate.

- Communities taking action to develop tree plans and increase trees in their local areas.

Pollinator action plan

- Adapting Canterbury City Council's ground maintenance regime to support pollinators.
- Supporting urban pollinators, for example through green roofs, planters and flower borders.
- Considering pollinators in planning applications.
- River Stour 'pollinator pathway'.

Canterbury riverside strategy

- Enhancing biodiversity habitats throughout urban section of the Great River Stour.
- Improving pollinator habitat, designating Local Nature Reserves and enhancing management of urban riverside spaces for nature.
- Removing fish passage barriers and connecting the river as a functioning ecological corridor through the City of Canterbury.
- Education on the nature of the river and river corridor.
- Leaving areas where nature can be undisturbed.

Conclusion - Taking the plan forward

This Local Nature Recovery Strategy sets out a shared vision for a stronger, more connected network of nature-rich habitats across the district. Through delivery of the actions identified in this plan, Canterbury City Council will help lead nature recovery efforts and coordinate the partnerships, projects and opportunities needed to achieve the ambitious vision outlined at the start of this document.

Successful implementation of this strategy relies on the combined efforts of landowners, businesses, developers, schools, community organisations,

environmental groups and residents. Everyone has a role to play in supporting nature recovery. This may be delivering projects, managing land for wildlife, volunteering, forming partnerships or championing biodiversity within their own organisations and communities.

Communication with Canterbury City Council will be an important part of this process, helping to identify opportunities, share ideas and ensure that local action is joined up.

Appendix 1

Shared Objectives

Shared objective	Biodiversity Plan	Green infrastructure strategy	Pollinator action plan	Tree, woodland and hedgerow strategy	Canterbury riverside strategy
Protecting habitats and species	The strategy sets out to protect biodiversity habitats and species. It aims to further embed biodiversity protection in CCC policy. It sets out to designate more sites as LNRs / Village Greens.	Actions to enhance nature in terrestrial, freshwater and coastal habitats. Actions to protect freshwaters.	Protecting and improving pollinator habitats. Raising awareness and protecting habitats of rare pollinators.	Protecting trees, woodlands and hedgerows, especially ancient woodland. Encourage woodland management to support nature. Conversion of coniferous plantation to broadleaved woodland.	Sets out need and actions to protect habitats and species in and adjacent to the River Stour.
Connecting and expanding habitats and species	The strategy sets out a strategic vision for a nature recovery network. This details the core sites and the connections needed to expand habitats and species.	Sets out strategic green and blue infrastructure linkages for the whole district as well as for Whitstable, Herne Bay and Canterbury City. Includes actions around urban greening and linking urban to rural areas. Includes cross-boundary linkages.	Action to identify pollinator corridors. Trialling a pollinator pathway along the River Stour.	Increase canopy cover, especially in areas where this is below the Kent average. To increase trees, woodlands and hedgerows where these will connect habitats. Encourage natural regeneration of trees.	Improves connections along this important blue-green corridor and chalk river, including through the urban area. Removal of barriers for fish passage.
Positive action on Canterbury City Council's estate	Through this strategy Canterbury City Council has committed to improving biodiversity management across its sites.	Includes actions to manage CCC owned sites for biodiversity; including nature areas and other greenspaces and parks.	Range of actions to increase the value of CCC-owned land for pollinators, including planting and changing management regimes.	Ensure all council-owned trees and woodlands are managed and as resilient as possible. Any trees which need to be removed will be replaced. Tree planting in greenspaces and parks.	Several riverside sites owned by CCC. Some designated as Local Nature Reserves and managed for nature.

Shared objective	Biodiversity Plan	Green infrastructure strategy	Pollinator action plan	Tree, woodland and hedgerow strategy	Canterbury riverside strategy
Climate change adaptation and mitigation	Climate change vulnerability is detailed for each of the habitats. Actions in this strategy will help habitats and species to adapt to a changing climate.	Includes actions for tree planting. Sets out strategic corridors - connected habitats will allow species to adapt to climate change.	Delivery of Plan will support pollinators in adapting to climate change. Action to embed needs of pollinators in climate change impact assessments.	Sequestering carbon by increasing trees. Highlighting need for species variation to adapt to climate change, and threats to trees and woodlands.	A river corridor which is well-connected and with thriving biodiversity will be more resilient to climate change. Sets out actions for adaptation to climate change impacts.
Good outcomes from development	The actions in this strategy set out to embed consideration of biodiversity with planning, with strengthened planning policy and reference to the Local Nature Recovery Strategy.	The Green Infrastructure Strategy is evidence for the Local Plan and guides outcomes required from development.	Objective to use the planning system to better protect pollinators and to increase and connect habitats. Embedding pollinators in Local Plan evidence documents and Biodiversity Net Gain.	Deliver more street trees in new development. New homes to provide 20% tree cover. Work with developers to fund tree planting projects. Include trees in Biodiversity Net Gain.	Strategic plan and design guide for development in proximity to the river. Using developer contributions to fund delivery.
Grassroots and community action	Community action for biodiversity is an important way that this strategy will be delivered. Actions are included to support communities.	Community action is an important mechanism to deliver the strategy. Strategy includes actions to increase access to nature for communities.	Encouraging others who own land to improve it for pollinators. Setting up shared equipment. Providing information for those wishing to support pollinators.	Involving parishes to develop action plans for tree expansion. Communities and volunteers developing tree projects. Setting up tree knowledge hub to support local action.	Working with several Friends groups and community organisations along the river.
Working in partnership	This strategy must be delivered in partnership. There are several strategic and ambitious partnerships which will be taken forward.	Includes actions to work in partnership, including in The Blean, at Seasalter and to deliver larger projects.	Work alongside Kent County Council, landowners, parish council and others to deliver actions for pollinators.	Working with landowners to develop increases in trees, woodlands and hedgerows.	Working in partnership with the Environment Agency and landowners.

Appendix 2

Project Directory

Biodiversity Grants

All Saints Nursery – forest school	'The Canterbury Hedge'
Canterbury Cemetery – pollinator planting	Cherry Orchard tree planting avenues
Canterbury Swifts – Swift boxes in Herne Bay	Curtis Wood management
Chislehurst Parish Council – bird and bat boxes	Gorrell Valley Nature Reserve – pond creation
Hackington Parish Council – pond creation	Gorrell Valley Nature Reserve – tree planting
Ickham Village Hall – community garden improvements	Gorrell Valley Nature Reserve – Village Green preparation and designation
Love Hambrook Marshes – livestock fencing	Gorrell Valley Nature Reserve – small mammal survey
Kentish Stour Countryside Partnership – tree planting	Larkey Valley Wood management
Stream Walk Community Garden – pollinator planting	Long Rock management
Sturry Church – memorial garden improvements	Right to Grow – Saltmarsh Lane
Sturry Parish Council – centenary woodland and cemetery improvements	Reculver Country Park – skylark plots
Tyler Hill Nature Reserve – pond creation	Reculver Country Park – hedge planting
Water Meadows Primary School – habitat creation	Swalecliffe Miyawaki Mini Forest
Westbere Parish Council – bird and bat boxes	Westgate Parks – physic garden and wildflower meadow creation
West Cliff Bank – butterfly and pollinator meadow	
Wickhambreaux Village Hall – community garden improvements	

Appendix 3

Management Plans

Curtis Wood

Dane John Gardens (in development)

Gorrell Valley Nature Reserve

Larkey Valley Wood – Countryside Stewardship Management Plan

Long Rock

Old Park (in development)

Reculver Country Park

Tankerton Slopes

Westgate Parks

Wraik Hill

Appendix 4

KMLNRS Potential measures

Habitat type	Habitat	Potential measure reference number	Potential measure
Connectivity (CON)	Connectivity (CON2)	CON2.1	Installation of green bridges, wildlife crossings, tunnels and other appropriate structures, alongside retrofitting existing structures, to address historic fragmentation caused by major infrastructure.
Land management and land use (LM)	Land management and land use (LM4)	LM4.1	Protection of habitats and species sensitive to disturbance by employing site management, and other measures, which support connection to, and experience of, wildlife but ensures our most sensitive sites remain undisturbed.
Grasslands (GL)	Chalk grassland (GL1)	GL1.1	Maintain and enhance core, high quality and good condition chalk grassland sites through the application of conservation management sensitive to the existing and potential flora and fauna of the site.
Grasslands (GL)	Chalk grassland (GL1)	GL1.2	Increase the extent of high quality, connected chalk grassland by bringing appropriate sites, adjacent to core/ good condition sites, into conservation management.
Grasslands (GL)	Chalk grassland (GL1)	GL1.3	Increase functional links between chalk grassland and other habitats to maximise nature based solutions offered by improved connectivity.
Grasslands (GL)	Coastal and floodplain grazing marsh (GL2)	GL2.1	Increase opportunities to store winter water on land adjacent to grazing marsh to increase opportunities for “wetting” during spring/summer.
Grasslands (GL)	Coastal and floodplain grazing marsh (GL2)	GL2.2	Deliver grazing marsh habitat restoration, extension and creation where it will offer the greatest gains to support the county’s important grazing marsh flora and fauna, and is designed to minimise recreational disturbance and reduce risk from predation.
Grasslands (GL)	Coastal and floodplain grazing marsh (GL2)	GL2.3	Reconnect rivers with their former natural floodplain and improve the water storage ability of floodplain, in order to protect against climate change impacts and drought.

Habitat type	Habitat	Potential measure reference number	Potential measure
Grasslands (GL)	Lowland meadow (GL3)	GL3.1	Maintain and enhance core, high quality and good condition lowland meadow sites through the application of grazing/cutting regimes sensitive to the existing and potential flora and fauna of the site.
Grasslands (GL)	Lowland meadow (GL3)	GL3.2	Increase the extent of high quality, connected lowland meadow by creating new lowland meadow sites, in close proximity to core/good condition sites.
Grasslands (GL)	Acid grassland and heathland (GL4)	GL4.1	Implement appropriately designed management that prevents succession into secondary woodland and scrub encroachment and ensures that acid grassland is maintained and retained but not at the expense of the mosaic's heathland resource. Grazing regime provides maximum diversity and a combination of larger open areas and smaller mosaic "glades" to provide habitat for breeding birds, reptiles and invertebrates. Climate resilience is built into management.
Grasslands (GL)	Acid grassland and heathland (GL4)	GL4.2	Create new acid grassland sites from improved grassland and former arable sites.
Grasslands (GL)	Arable wild plants (GL5)	GL5.3	Design and deliver location and soil appropriate projects, targeted in the richest arable plant areas and on a variety of soil types, to create new, large areas dedicated to the promotion of arable wild plant diversity and abundance.
Successional habitats (SL)	Open mosaic habitats found on previously developed land (brownfield) (SH1)	SH1.1	Appropriate management plans in place for key sites, with measures that support the succession of habitats to occur naturally, increase edge habitat, create a graded profile of mixed habitat and provide features that support the species of interest most strongly tied to open mosaic habitats and, in particular, any species that the particular site in question is notable for.
Successional habitats (SL)	Scrub (SH2)	SH2.1	Selective conservation grazing of areas within the scrub to create open areas and allow for natural regeneration.
Successional habitats (SL)	Scrub (SH2)	SH2.2	Maintain and integrate areas of scrub within arable land, woodlands, grasslands, wetlands and urban habitats to encourage successional habitats and provide wildlife corridors.

Habitat type	Habitat	Potential measure reference number	Potential measure
Successional habitats (SL)	Scrub (SH2)	SH2.3	Put in place active scrub management that provides a mix of young and mature scrub, bare ground and links with surrounding habitat.
Woodland, trees and hedgerows (WTH)	Woodland (management) (WTH1)	WTH1.2	Restoration and extension of lowland and upland wood pasture and parkland.
Woodland, trees and hedgerows (WTH)	Woodland (management) (WTH1)	WTH1.3	Safeguard and enhance small pockets of woodland to provide key stepping stones for species movement and connect with hedgerows and scrub.
Woodland, trees and hedgerows (WTH)	Woodland (canopy cover) (WTH2)	WTH2.1	Extension of existing woodland through natural colonisation and planting.
Woodland, trees and hedgerows (WTH)	Woodland (canopy cover) (WTH2)	WTH2.2	Conversion of unproductive land for arable into woodland.
Woodland, trees and hedgerows (WTH)	Woodland (canopy cover) (WTH2)	WTH2.5	Plant more urban trees and create urban forests and orchards, ideally siting tree planting to where they will provide flood management, air quality and temperature regulation benefits.
Woodland, trees and hedgerows (WTH)	Woodland (resilience) (WTH4)	WTH4.2	Where appropriate, promote the restoration of Plantations on Ancient Woodland Sites (PAWS) sites to a more species rich woodland.
Woodland, trees and hedgerows (WTH)	Woodland (resilience) (WTH4)	WTH4.4	Establish green bridges to connect woodlands fragmented by road and rail.
Woodland, trees and hedgerows (WTH)	Ancient woodland and ancient and veteran trees (WTH5)	WTH5.3	Solitary ancient and veteran trees buffered with open space, with further protections offered with establishment of neighbouring wood pasture and agroforestry of mixed habitats.

Habitat type	Habitat	Potential measure reference number	Potential measure
Woodland, trees and hedgerows (WTH)	Ancient woodland and ancient and veteran trees (WTH5)	WTH5.4	Connectivity of ancient woodland improved by links to hedgerows, establishment of standard trees and increased standing deadwood.
Woodland, trees and hedgerows (WTH)	Wet woodland (WTH6)	WTH6.1	Establish and implement long-term management plans for wet woodland and surrounding land, which ensures connectivity between waterways and woodland and incorporates nature-based water management solutions, such as leaky dams, felling, blocking drainage channels to allow for seasonal flooding.
Woodland, trees and hedgerows (WTH)	Wet woodland (WTH6)	WTH6.2	Creation of ponds within woodlands, and naturally regenerated riparian zones.
Woodland, trees and hedgerows (WTH)	Gill woodland (WTH7)	WTH7.1	Create buffer zones around the gill woodland to ensure they remain largely undisturbed.
Woodland, trees and hedgerows (WTH)	Traditional orchards (WTH9)	WTH9.1	Restore and bring established traditional orchards back into positive management, including long sward length, wildflower meadow strips between trees, limited or no spraying, sensitive pruning and dead wood/ dying trees retained.
Woodland, trees and hedgerows (WTH)	Traditional orchards (WTH9)	WTH9.2	Establish new community orchards, in appropriate areas and with a focus on urban locations.
Freshwater (FW)	Rivers (naturalising) (FW1)	FW1.2	Undo historical physical modifications which have disconnected rivers and floodplains and restore natural processes through a range of approaches including supply of woody material and allowing this to remain in the channel where not causing flood risk, restoring channel stage zero, restoration of historic meanders, bed raising, regrading banks to create shallow edges and establishing mosaics of water meadows, wet grasslands and wet woodlands, to allow inundation of floodplains above Q10 flows.
Freshwater (FW)	Rivers (naturalising) (FW1)	FW1.3	Restore more natural shape of channels by narrowing overwide channels, especially where siltation, uniform and low flows and lack of habitat diversity are a pressure.

Habitat type	Habitat	Potential measure reference number	Potential measure
Freshwater (FW)	Rivers (naturalising) (FW1)	FW1.4	Open up and daylight culverted rivers, streams and ditches including ephemeral/ seasonal streams where modification is redundant.
Freshwater (FW)	Rivers (clean) (FW2)	FW2.4	Prevent road runoff entering rivers through the installation of SuDS, downstream defenders, or similar interception features on highways, local roads, and existing and new.
Freshwater (FW)	Rivers (supply) (FW3)	FW3.2	Retain and enhance habitats that support infiltration such as grasslands, woodland, reedbeds and lowland peat. Avoid reduction of infiltration in key recharge areas and around chalk stream winterbournes.
Freshwater (FW)	Rivers (supply) (FW3)	FW3.3	Slow the flow and store water in the catchment in areas of low agricultural productivity or where there is space in urban areas, working with natural processes, to implement natural flood management e.g. through installation of large woody material, creation of wet woodlands, lowland meadows, reedbeds, flood attenuation ponds and similar, especially where they can reduce flood risk and provide clean recharge to the groundwater body.
Freshwater (FW)	Rivers (buffers) (FW4)	FW4.1	Establish and maintain wide areas of semi-natural, complex habitats along banks of rivers and streams (including seasonal and headwater reaches), allowing light grazing of wet grassland areas with a focus on native livestock breeds, and encouraging woodland particularly where there is need for more shading of rivers to provide cooler temperatures, increasing riparian tree cover to 30%. Allow natural regeneration of habitats and recolonisation
Freshwater (FW)	Rivers (buffers) (FW4)	FW4.2	Use re-development of old infrastructure as an opportunity to re-naturalise river corridors (e.g. old industrial sites).
Freshwater (FW)	Rivers (buffers) (FW4)	FW4.3	Combine buffers with the use of nature based solutions to hold water on floodplains and in areas upstream of communities at risk of flooding, and clean water. This could include for example large woody debris, sediment traps, floodplain wetlands.
Freshwater (FW)	Headwater streams (FW5)	FW5.2	Restore and establish wetlands in headwater areas and around natural springs, by reversing and preventing further drainage of springs and seepage areas.

Habitat type	Habitat	Potential measure reference number	Potential measure
Freshwater (FW)	Headwater streams (FW5)	FW5.3	Renaturalise urban and modified sections of headwaters including ephemeral streams such as winterbournes (e.g. where they have been straightened and deepened to drain woodlands and agricultural land) including through approaches such as stage 0 restoration.
Freshwater (FW)	Lowland mire sites (FW7)	FW7.1	Manage existing fen and bog sites to reduce encroachment, including through scrub management and appropriate grazing.
Freshwater (FW)	Lowland mire sites (FW7)	FW7.2	Create and maintain wide buffers around existing fen and bog sites to safeguard them from diffuse pollution.
Freshwater (FW)	Lowland mire sites (FW7)	FW7.3	Restore lowland peat habitats by reversing drainage and supporting re-wetting of areas.
Freshwater (FW)	Freshwater wetlands (FW9)	FW9.1	Enhance reservoirs and similar waterbodies to provide better wildlife habitat. Ensure any such water bodies include features that enable wildlife to get out of water.
Urban environments (URB)	Urban environment (space for nature) (URB2)	URB2.1	Areas of urban greenspace managed to maximise provision for nature in urban areas, providing a greater complexity of habitats, with year round shelter, forage and food.
Urban environments (URB)	Urban environment (space for nature) (URB2)	URB2.2	Naturalise urban river corridors, by removing river obstacles where appropriate and replacing hard river banks with native buffer verges and riverside trees.
Urban environments (URB)	Urban environment (space for nature) (URB2)	URB2.3	Target tree establishment to areas of low canopy cover.

Habitat type	Habitat	Potential measure reference number	Potential measure
Coastal (CL)	Open coast and estuaries (CL1)	CL1.3	Hard defences removed where appropriate, to allow space for tidal ingress and enable the managed realignment of the coastline, to mitigate coastal squeeze and allows intertidal habitats to be more resilient to climate change.
Coastal (CL)	Open coast and estuaries (CL1)	CL1.4	Create areas for saltmarsh restoration, seagrass regeneration and high tide roosts and provide breeding areas for seabirds and/or waders, with appropriate measures to prevent or reduce disturbance and predation.
Coastal (CL)	Saltmarsh and mudflats (CL2)	CL2.2	Small-scale saltmarsh restoration. using traditional materials to slow down loss
Coastal (CL)	Saltmarsh and mudflats (CL2)	CL2.3	Create new high tide roosts, in areas less vulnerable to rising sea levels.
Coastal (CL)	Saltmarsh and mudflats (CL2)	CL2.4	Link areas with other wetland habitats to form a landscape mosaic of wetlands to reduce the tendency for waders and seabirds to be concentrated at key hotspots and reserves.
Coastal (CL)	Seagrass (CL3)	CL3.1	Address threats to seagrass beds by putting in place management which: - Reduces and addresses pollution sources impacting seagrass restoration and growth. - Removes invasive spartina where it is known to be invading, smothering or limiting seagrass extension and restoration. - Minimise damage from boat anchors, dredging, fishing and trampling.
Coastal (CL)	Seagrass (CL3)	CL3.2	Increase areas of existing seagrass beds.
Coastal (CL)	Native reef building shellfish (CL5)	CL5.1	Safeguard established areas of native oysters and blue mussels by developing protected areas with management measures, in collaboration with local stakeholders, including the local fishing community.
Coastal (CL)	Native reef building shellfish (CL5)	CL5.2	Where practical, remove invasive, non-native species from the beds of native oysters and blue mussels.

Habitat type	Habitat	Potential measure reference number	Potential measure
Coastal (CL)	Native reef building shellfish (CL5)	CL5.3	Create suitable substrate for native oysters to colonise, focussing on existing/historic areas, and address the lack of larvae in the landscape.
Coastal (CL)	Native reef building shellfish (CL5)	CL5.4	Create suitable substrate for blue mussels to colonise, focussing on existing/historic areas.
Coastal (CL)	Saline lagoons (CL6)	CL6.1	Safeguard existing saline lagoons from loss and damaging activities that harm and/or pollute the lagoons.
Coastal (CL)	Saline lagoons (CL6)	CL6.2	Establish buffer zones and/or adjust site features and topography, to ensure ecological function of saline lagoon is not undermined by disturbance; enhance marginal habitat.
Coastal (CL)	Saline lagoons (CL6)	CL6.3	Create new saline lagoons to connect wetland sites in transitional areas that are likely to flood, taking into account proximity to sources of recreational disturbance.
Coastal (CL)	Vegetated shingle (CL7)	CL7.1	Safeguard existing habitat through access and management and interventions (e.g. allocated routes and boardwalks) that minimise the impact of footfall and recreational disturbance on this delicate habitat.
Coastal (CL)	Vegetated shingle (CL7)	CL7.2	Safeguard and extend supporting habitats, such as species-rich grasslands, next to coastal shingle that can act as seepage areas and support a mosaic of habitats for important coastal shingle species.
Coastal (CL)	Sand dunes (CL8)	CL8.1	Management of dunes to reduce scrub encroachment, remove invasive species and reduce disturbance pressures of recreational activities. Management to include year round low intensity grazing in the absence of endectocides, and with high quality fodder in winter to maintain high dung quality.
Coastal (CL)	Sand dunes (CL8)	CL8.2	Enable more naturalised and mobile sand dune systems, through a full range of successional stages of sand stabilisation across the dune system, from mobile sparsely vegetated foredunes, young dunes with dense Marram Grass clumps, to more established dunes with varied vegetation, stable sandy grassland or heath, open sandy areas and dune slacks. Address overstabilisation of the dunes to increase dune mobility and sand movement.

KMLNRS Wider measures

Habitat type	Habitat	Wider measure reference number	Wider measure
Connectivity (CON)	Connectivity (CON1)	CON1.1	Improve functional connectivity corridors between the designated and protected sites of the Areas of Particular Importance for Biodiversity and safeguard these areas.
Connectivity (CON)	Connectivity (CON3)	CON3.1	Set aside and/or put in place active management to prevent loss of, or damage to, areas of importance for functional connectivity.
Connectivity (CON)	Connectivity (CON3)	CON3.2	Enhance habitats alongside the county's highway, railway, cycleway, pathway and PROW networks and National Trails to become functional networks for wildlife movements and provide opportunities for people to connect with nature.
Connectivity (CON)	Connectivity (CON3)	CON3.3	Maximise opportunities to restore wildflower habitat on road verges to contribute to a county network of wildlife-friendly habitat corridors.
Connectivity (CON)	Connectivity (CON3)	CON3.4	Implement broad buffer zones and connecting strips between habitat areas designated or managed for their biodiversity value.
Land management and land use (LM)	Land management and land use	LM1.1	New or extended farmers clusters in Areas that Could become of particular Importance for Biodiversity not already covered.
Land management and land use (LM)	Land management and land use	LM2.1	Use of nature-based solutions to improve climate resilience of farmland.
Land management and land use (LM)	Land management and land use	LM3.1	Increased water capture, rainwater harvesting, reservoirs, ponds, holding areas, leaky wood dams.
Grasslands (GL)	Lowland meadow (GL3)	GL3.3	Increase connectivity of, and provision for wildlife in, lowland meadows by leaving field margins uncut, varied sward heights, hedgerows well-connected and integrate some bare patches or banks within the grassland site.

Habitat type	Habitat	Wider measure reference number	Wider measure
Grasslands (GL)	Lowland meadow (GL3)	GL3.4	Establish neutral grasslands on floodplains, to create resilience to flooding and drought and protect water quality.
Grasslands (GL)	Arable plants (GL5)	GL5.1	Management of field margins to provide graduated field edges, with wider and cultivated margins.
Grasslands (GL)	Arable plants (GL5)	GL5.2	Management of fields, with mixed times of cultivation to encourage a diversity of arable wild plants.
Woodland, trees and hedgerows (WTH)	Woodland (management) (WTH1)	WTH1.1	Holistic management of woodlands and transitional open spaces to sensitively consider the understory, ground flora and soil; allow a variety of successional states and variety of species, developing to mature, providing different canopy layers; management of internal edge, including creation of glades and rides; preserve natural decay stages of woodland including old growth, dead and dead standing wood; where appropriate reinstate and increase coppicing as a management measure; deliver targeted management in order to provide habitats for vulnerable woodland species.
Woodland, trees and hedgerows (WTH)	Woodland (canopy cover) (WTH2)	WTH2.3	Plant more trees in hedgerows.
Woodland, trees and hedgerows (WTH)	Woodland (canopy cover) (WTH2)	WTH2.4	Use tree and hedgerow establishment and scrub to increase connectivity, provide wildlife corridors and address fragmented areas of woodland.
Woodland, trees and hedgerows (WTH)	Woodland (resilience) (WTH4)	WTH4.1	Management that facilitates and enables the natural regeneration of woodlands, by reducing grazing pressures.
Woodland, trees and hedgerows (WTH)	Woodland (resilience) (WTH4)	WTH4.3	Increase connectivity of woodland habitats by creating semi-natural habitat buffers strips, that reduce the gaps between patches and extend woodland edge habitats, and providing links through trees outside the woodland.
Woodland, trees and hedgerows (WTH)	Ancient woodland and ancient and veteran trees (WTH5)	WTH5.1	Appropriate and targeted management of ancient woodland, in order to retain and enhance specific features of ancient woodland and enhance biodiversity.

Habitat type	Habitat	Wider measure reference number	Wider measure
Woodland, trees and hedgerows (WTH)	Ancient woodland and ancient and veteran trees (WTH5)	WTH5.2	Establishment of wide buffer zones around ancient woodland that are linked to hedgerows, to extend habitat connectivity.
Woodland, trees and hedgerows (WTH)	Hedgerows (WTH8)	WTH8.1	Actively manage the county's hedgerows, fill gaps and remove invasive species; rejuvenate and restore hedgerows that have declined in structural condition. Increase the extent of hedgelaying, coppicing and gapping up within this management.
Woodland, trees and hedgerows (WTH)	Hedgerows (WTH8)	WTH8.2	Buffer hedgerows with grass margins, scrub and headlands.
Woodland, trees and hedgerows (WTH)	Hedgerows (WTH8)	WTH8.3	Strategic siting of new and extended hedgerows to aid habitat connectivity and support species forage, shelter and movement; restore links to copse and woodland.
Freshwater (FW)	Rivers (naturalising) (FW1)	FW1.1	Monitor, manage, control expansion and remove invasive species from ponds, lakes, wetlands, rivers and streams and lowland drains.
Freshwater (FW)	Rivers (naturalising) (FW1)	FW1.5	Increase longitudinal connectivity in rivers by removing redundant barriers and making remaining barriers passable for fish, riverine mammals and natural sediment.
Freshwater (FW)	Rivers (naturalising) (FW1)	FW1.6	Support the delivery of protected freshwater sites restoration plans, through addressing drought and water quality impacts across the wider catchment.
Freshwater (FW)	Rivers (clean) (FW2)	FW2.1	Discharge agricultural land drains into interception features in buffers, rather than the stream network.
Freshwater (FW)	Rivers (clean) (FW2)	FW2.2	Establish and manage functional buffer strips and other interception features for all flow pathways to hold runoff and remove pollutants including chemicals, nutrients and sediment, before it enters rivers and streams.
Freshwater (FW)	Rivers (clean) (FW2)	FW2.3	Reduce input of diffuse phosphate and nitrate pollution to surface and groundwater bodies through the use of integrated constructed wetlands and reedbeds in addition to hard engineered treatments.

Habitat type	Habitat	Wider measure reference number	Wider measure
Freshwater (FW)	Rivers (clean) (FW2)	FW2.5	Reduce the risk of combined sewer overflows by reducing surface water entering the drainage system for example through the use of SuDS, natural flood management measures or similar.
Freshwater (FW)	Rivers (supply) (FW3)	FW3.1	Safeguard rivers and freshwater habitats in county most sensitive to low water levels through measures to reduce abstraction and water use in catchment
Freshwater (FW)	Rivers (supply) (FW3)	FW3.4	Hold and slow water in headwater streams through nature-based solutions (leaky woody dams and large woody debris, reedbeds, etc), and approaches such as stage zero to restore more natural channel shape and processes especially where this can provide flood risk benefits and improve stable flows.
Freshwater (FW)	Headwater streams (FW5)	FW5.1	Safeguard headwater streams from agricultural pollution, erosion, and road runoff through the use of semi-natural buffer strips and interception features.
Freshwater (FW)	Ponds (FW6)	FW6.1	Restore ghost ponds, including restoration of dew ponds and dip slope ponds, hammer and furnace ponds.
Freshwater (FW)	Ponds (FW6)	FW6.2	Enhance online lakes to include a mosaic of habitats and watercourses.
Freshwater (FW)	Reedbeds (FW8)	FW8.1	Manage reedbeds to prevent encroachment of woodland, and by managing associated ditches and dykes, conservation grazing, minimal chemical interventions, consider management of saline flooding.
Freshwater (FW)	Freshwater wetlands (FW9)	FW9.2	Manage, restore and expand river valley wetlands, for example floodplain meadows, floodplain grazing marshes, reedbeds and mudflats.
Freshwater (FW)	Freshwater wetlands (FW9)	FW9.3	Provide opportunities for spring flooding (e.g. for waders) by creating water storage areas for winter rainfall.
Freshwater (FW)	Freshwater wetlands (FW9)	FW9.4	Connect existing wetlands through a mosaic of habitats.

Habitat type	Habitat	Wider measure reference number	Wider measure
Urban environments (URB)	Urban environment (connectivity) (URB1)	URB1.1	Employ conservation cuts, minimise mowing and leave wild strips, buffers and corners on verges and grass areas in areas known to be of importance for pollinators connectivity.
Urban environments (URB)	Urban environment (connectivity) (URB1)	URB1.2	Enhance and safeguard existing greenspace and trees that provide key stepping stones between larger natural spaces that are either within or at the edge of urban areas.
Urban environments (URB)	Urban environment (connectivity) (URB1)	URB1.3	Establish wildlife corridors and provide habitat stepping stones across urban and developed landscapes by enhancing, extending and creating new green spaces, ponds, tree cover, green roofs and walls and wild verges/ swathes.
Urban environments (URB)	Urban environment (nature-based solutions) (URB3)	URB3.1	Trees and hedgerows specifically planted to deliver air quality, temperature regulation/cooling and surface water management benefits and targeted to areas where it is most needed and will deliver the greatest impact.
Urban environments (URB)	Urban environment (nature-based solutions) (URB3)	URB3.2	Prioritise the use of natural flood management/nature based solutions over engineered, hard solutions, to manage areas at high risk from surface water flooding.
Urban environments (URB)	Urban environment (nature-based solutions) (URB3)	URB3.3	New and retrofitted green walls and roofs to enhance biodiversity, whilst also providing temperature regulation in settings most at risk from urban heat island effects.
Urban environments (URB)	Urban environment (nature-based solutions) (URB3)	URB3.4	Increased green and blue infrastructure, and more natural space, is targeted to communities where it is most needed to deliver health and wellbeing benefits and greater connection with nature.
Coastal (CL)	Open coast and estuaries (CL1)	CL1.1	Where hard defences must remain, apply the “greening the grey” approach, softening edges to encourage wildlife.

Habitat type	Habitat	Wider measure reference number	Wider measure
Coastal (CL)	Open coast and estuaries (CL1)	CL1.2	Refuges for wildlife created with access managed to reduce disturbance.
Coastal (CL)	Open coast and estuaries (CL1)	CL1.5	Hard defences removed where appropriate to enable reconnection of fragmented habitats through managed realignment.
Coastal (CL)	Saltmarsh and mudflats (CL2)	CL2.1	Maintain high tide roosts and nesting sites, with key sites fenced off, to limit disturbance and safeguard inland feeding, breeding and overwintering areas.
Coastal (CL)	Saltmarsh and mudflats (CL2)	CL2.4	Link areas with other wetland habitats to form a landscape mosaic of wetlands to reduce the tendency for waders and seabirds to be concentrated at key hotspots and reserves.
Coastal (CL)	Chalk reefs and cliffs (CL4)	CL4.1	Management of problematic non-native species.
Coastal (CL)	Chalk reefs and cliffs (CL4)	CL4.2	Control leisure boat and other recreational activity in chalk reef areas
Coastal (CL)	Coastal disturbance (CL9)	CL9.1	Develop zoned recreational areas that limit, restrict or prevent leisure activities which can disturb wildlife and damage sensitive habitats; safeguard offshore islands.
Coastal (CL)	Coastal disturbance (CL9)	CL9.2	Building up of existing and creation of new seal haul out sites, which are adequately managed to provide safe areas for them.

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Endnotes

- 1 As a key document evidencing the draft Regulation 19 Local Plan, it works towards the same timeframe as the Local Plan.
- 2 Estimated costs and funding sources do not include cost of CCC officer time.
- 3 Habitats as described in the Natural Environment and Rural Communities (NERC) Act 2006 s.41 and the biodiversity duty s.40 amended by the Environment Act 2021.
- 4 The settlements are using Built up Areas mapping 2022 from the Office of National Statistics.
- 5 Kent Nature Partnership. 2021. State of Nature in Kent 2021.
- 6 Data from Natural England sourced May 2024
- 7 ARCH. 2012. Kent Habitat Survey.
- 8 ARCH. 2012. Kent Habitat Survey. Neutral grassland includes lowland meadow and coastal and floodplain grazing marsh
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