Appendix 1.2b - Methodology for Wider Measures Mapping

Kent and Medway Local Nature Recovery strategy

Making space for the county's nature

Introduction

The Strategy identifies priorities for nature recovery and the potential measures (actions) that will help deliver against these. Where data and evidence was available, these measures were mapped to where it was considered they would be best delivered to achieve the greatest gains for nature and derive the greatest benefits from a healthy, functioning environment. Where identified actions applied to broad areas or where it was not possible to determine specific locations to carry out the proposed action, these were identified as wider measures. They were still mapped to but were not consider refined enough to inform the Areas that Could become of particular Importance to Biodiversity. Collectively, these wider measures identify areas of additional opportunities for nature recovery but do not form a part of the formal Local Nature Recovery Strategy's Local Habitat Map.

Mapping was a desk-based exercise, with evidence and data used to inform where measures would best be targeted; the process followed requirements set out by Defra. The work was undertaken by the Kent Wildlife Trust, with support from Kent and Medway Biological Records Centre, under the expert input and advice of a data, evidence and mapping technical advisory group. The initial mapping was also reviewed and revised with partners and stakeholders before finalising. More detail on the mapping process is provided in Part 1 Chapter 5.

Measures with a reference code are the measures the Strategy has mapped. The mappable measures deliver against one of the Strategy principles of better, bigger, more, joined up and nature-based solutions.

Ambition theme	**Potential measure prefix**
Connectivity	CON
Nature based solutions	(not mapped)
Land management and land use	LM
Grassland habitats	GL
Successional habitats	SH
Woodland, trees and hedgerows	WTH
Freshwater habitats	FW
Urban environments	URB
Coastal habitats	CL

The wider measures maps are available online at Local Nature Recovery Strategy mapping portal | Making Space For Nature Kent

A users guide to the online mapping tool is available from How to use the online mapping tool | Making Space For Nature Kent

This document outlines the mapping methodology and data used for the Strategy's wider measures. Where measures appear missing from the list, it will be because they are potential measures – mapping methodology for these is provided in Appendix 1.2a.

Connected ambition wider measures mapping

Map reference	**CON1.1**	Strategy principle	**Connected**
Wider measure	**Improve functional connectivity corridors between the designated and protected sites of the Areas of Particular Importance for Biodiversity and safeguard these areas.**		
Mapping method	Based on bottlenecks and areas of low existing flow for designated sites, with urban and suburban land cover removed.		
Data used	- Sites of Special Scientific Interest, Ramsar, Special Protected Areas, Special Areas of Conservation (Natural England, 2024) - Local Wildlife Sites (Kent Wildlife Trust, 2023) - Kent Wildlife Trust Reserves (Kent Wildlife Trust, 2023) - RSPB Reserves (Royal Society for the Protection of Birds, 2024) - Woodland Trust Reserves (The Woodland Trust, 2020) - Country Parks (Natural England, 2024) - Local Nature Reserves (Natural England, 2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - CEH landcover: Urban and Suburban (2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Urban/suburban areas excluded on basis that they offer restricted opportunity, with limited chance of successful ecological results for improved connectivity.		

Map reference	**CON3.1**	Strategy principle	**Better**
Wider measure	**Set aside and/or put in place active management to prevent loss of, or damage to, areas of importance for functional connectivity.**		
Mapping method	Mapped to all combined connectivity model outputs.		
Data used	- Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation).		

Map reference	**CON3.2**	Strategy principle	**Connected**
Wider measure	**Enhance habitats alongside the county's highway, railway, cycleway, pathway and public right of way networks and National Trails to become functional networks for wildlife movements and provide opportunities for people to connect with nature.**		
Mapping method	Mapped highways, PROW, cycle routes and National Trails and refined to sites overlapping with the connectivity model for designated sites.		
Data used	- Highway Boundary (National Highways Spatial, 2024) - Public Rights of Way (PRoW) (2023) - National Cycle Network (Sustrans, 2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation).		

Map reference	**CON3.3**	Strategy principle	**Connected**
Wider measure	**Maximise opportunities to restore wildflower habitat on road verges to contribute to a county network of wildlife-friendly habitat corridors.**		
Mapping method	Connectivity analysis (using Condatis) run on meadow, heath acid, chalk bottlenecks habitats combined with Bee Lines and road network. Urban and suburban land cover removed.		
Data used	- Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - Buglife Bee lines (2021) - Department for Transport Major Road Network (2021) - CEH landcover: Urban and Suburban (2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Urban/suburban areas excluded on basis that they offer restricted opportunity, with limited chance of successful ecological results for improved connectivity.		

Map reference	**CON3.4**	Strategy principle	**Connected**
Wider measure	**Implement broad buffer zones and connecting strips between habitat areas designated or managed for their biodiversity value.**		
Mapping method	Bottlenecks and areas of low existing flow for designated sites, with urban and suburban land cover removed.		
Data used	- Sites of Special Scientific Interest, Ramsar, Special Protected Areas, Special Areas of Conservation (Natural England, 2024) - Local Wildlife Sites (Kent Wildlife Trust, 2023) - Kent Wildlife Trust Reserves (Kent Wildlife Trust, 2023) - RSPB Reserves (Royal Society for the Protection of Birds, 2024) - Woodland Trust Reserves (The Woodland Trust, 2020) - Country Parks (Natural England, 2024) - Local Nature Reserves (Natural England, 2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - CEH landcover: Urban and Suburban (2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Urban/suburban areas excluded on basis that they offer restricted opportunity, with limited chance of successful ecological results for improved connectivity.		

Land management and land use ambition wider measures mapping

Map reference	**LM1.1**	Strategy principle	**Connected**
Wider measure	**New or extended farmers clusters in Areas that Could become of particular Importance for Biodiversity not already covered.**		
Mapping method	Manually identified farmer cluster opportunities.		
Data used	-		
Explanation for method adopted and any exclusions			

Map reference	**LM2.1**	Strategy principle	**Nature-based solutions**
Wider measure	**Use of nature-based solutions to improve climate resilience of farmland.**		
Mapping method	Mapped to all arable or improved grassland.		
Data used	- CEH landcover: Arable and Horticulture and Improved grassland (2024)		
Explanation for method adopted and any exclusions	No data on areas of most vulnerability in county exist so mapped to extent of county.		

Map reference	**LM3.1**	Strategy principle	**Nature-based solutions**
Wider measure	**Increased water capture, rainwater harvesting, reservoirs, ponds, holding areas, leaky wood dams.**		
Mapping method	Mapped to all arable or improved grassland that falls within the flood zone.		
Data used	- CEH landcover: Arable and Horticulture and Improved grassland (2024) - Environment Agency Flood Map for Planning (2018) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	Allocated sites removed, as not appropriate for floodplain creation.		

Lowland meadow priority wider measures mapping

Map reference	**GL3.3**	Strategy principle	**Connected**
Wider measure	**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.**		
Mapping method	Mapped to bottlenecks and areas of low existing flow for lowland meadows, with urban and suburban land cover removed.		
Data used	- Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - CEH landcover: Urban and Suburban (2024) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Urban/suburban areas excluded on basis that they offer restricted opportunity, with limited chance of successful ecological results for improved connectivity. Allocated sites on basis that they offer restricted opportunity, with limited chance of successful ecological results.		

Map reference	**GL3.4**	Strategy principle	**Nature-based solutions**
Potential measure	**Establish neutral grasslands on floodplains, to create resilience to flooding and drought and protect water quality.**		
Mapping method	Soilscape data from Cranfield was used to select neutral soil and potential floodplain areas, using the following soil types: Fen peat soils, Loamy soils with naturally high groundwater, Loamy and clayey soils of coastal flats with naturally high groundwater, Loamy and clayey floodplain soils with naturally high groundwater. Allocated sites removed.		
Data used	- Cranfield Soil data (2024) - Environment Agency Flood Map for Planning (2018) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	Soil types used as indicator as potential floodplain area opportunity. Allocated sites removed, as not appropriate for floodplain creation.		

Arable fields ambition priority measures mapping

Map reference	**GL5.1**	Strategy principle	**Better**
Wider measure	**Management of field margins to provide graduated field edges, with wider and cultivated margins.**		
Mapping method	Mapped to all existing arable and improved grassland field margins (the first 5m within a polygon). Urban, suburban and adopted allocation areas are removed.		
Data used	- Kent Habitat Survey: Rural Field Margins (2012) - CEH landcover: Urban and Suburban (2024) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	A 5m internal buffer was applied to each arable and pasture field parcel within the county. This identifies each potential field margin where the measure could be applied. The buffer was internal only as external boundaries likely fall out of the landowner's control. 5m was agreed as it falls midway in the Natural England recommended "outer 2-12m margin". Allocated sites and urban/suburban areas excluded on basis that they offer limited opportunity, with limited chance of successful ecological restoration results returning high quality arable plant areas.		

Map reference	**GL5.2**	Strategy principle	**Better**
Wider measure	**Management of fields, with mixed times of cultivation to encourage a diversity of arable wild plants.**		
Mapping method	All existing arable and improved grassland field cores. Includes manually added sites identified by Plantlife and Kent Botanical Recording Group. Urban and suburban areas are removed.		
Data used	- Kent Habitat Survey: Rural Field Margins (2012) - Ranscombe Arable Plant Project (Plant Life, 2024) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	Mapped to habitat extent. Allocated sites and urban/suburban areas excluded on basis that they offer limited opportunity, with limited chance of successful ecological restoration results returning high quality arable plant areas.		

Woodland (management) priority wider measures mapping

Map reference	**WTH1.1**	Strategy principle	**Better**
Wider measure	**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.**		
Mapping method	Mapped to existing habitat.		
Data used	- Kent Wildlife Trust Master Habitat: Woodland (2023) - Natural England Priority Habitat Inventory: Deciduous woodland and Traditional Orchards (2024)		
Explanation for method adopted and any exclusions	Mapped to extent of habitat.		

Woodland (canopy cover) priority wider measures mapping

Map reference	**WTH2.3**	Strategy principle	**More**
Wider measure	**Plant more trees in hedgerows.**		
Mapping method	Mapped low-sensitivity woodland creation areas overlap with hedgerows.		
Data used	- Forestry Commission: England woodland creation low sensitivity map v4.0 (2023) - CEH Hedgerow (2023)		
Explanation for method adopted and any exclusions	The low-sensitivity zones suitable for woodland creation indicate areas with potential for establishing new woodland or sensitivities that may prevent tree planting, highlighting locations where it should be easier to deliver woodland creation compared to other areas.		

Map reference	**WTH2.4**	Strategy principle	**Connected**
Wider measure	**Use tree and hedgerow establishment and scrub to increase connectivity, provide wildlife corridors and address fragmented areas of woodland.**		
Mapping method	Identified regions buffered by 75m woodland areas overlapping with areas suitable for low-sensitivity woodland creation.		
Data used	- Forestry Commission: England woodland creation low sensitivity map v4.0 (2023) - Kent Wildlife Trust Master Habitat: Woodland (2023)		
Explanation for method adopted and any exclusions	Based on general eligibility criteria for the England Woodland Creation Offer (EWCO) for areas that use natural colonisation, which requires sites to be within 75 metres of a viable seed source of at least 2 tree species. The low-sensitivity zones suitable for woodland creation indicate areas with potential for establishing new woodland or sensitivities that may prevent tree planting, highlighting locations where it should be easier to deliver woodland creation compared to other areas.		

Woodland (resilience) priority wider measures mapping

Map reference	**WTH4.1**	Strategy principle	**Better**
Wider measure	**Management that facilitates and enables the natural regeneration of woodlands, by reducing grazing pressures.**		
Mapping method	Identified buffered woodland, including Priority Habitat Inventory woodland (buffer was 75m) areas that overlap with a sensitivity map for woodland creation. Allocated sites and urban areas excluded.		
Data used	- Forestry Commission: England woodland creation low sensitivity map v4.0 (2023) - Kent Wildlife Trust Master Habitat: Woodland (2023) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25) - Natural England Priority Habitat Inventory: Deciduous Woodland and Traditional Woodland (2024) - Ordnance Survey Built up areas (2022)		
Explanation for method adopted and any exclusions	Based on general eligibility criteria for the England Woodland Creation Offer (EWCO) for areas that use natural colonisation, which requires sites to be within 75 metres of a viable seed source of at least 2 tree species. Allocated sites and urban areas excluded on basis that they offer limited opportunity for the measure, with natural regeneration in these areas unlikely to be successful/feasible.		

Map reference	**WTH4.3**	Strategy principle	**Connected**
Wider measure	**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.**		
Mapping method	Identified woodland connectivity areas and connectivity bottlenecks and refined these based on overlap with the sensitivity for woodland creation areas. Allocated sites and urban areas excluded.		
Data used	- Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - Natural England Priority Habitat Inventory: Lowland Mixed Deciduous Woodland (2024) - Forestry Commission: England woodland creation low sensitivity map v4.0 (2023) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25) - CEH Urban areas (2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). The low-sensitivity zones suitable for woodland creation indicate areas with potential for establishing new woodland or sensitivities that may prevent tree planting, highlighting locations where it should be easier to deliver woodland creation compared to other areas. Allocated sites and urban areas excluded on basis that they offer limited opportunity for the measure.		

Ancient woodland and ancient and veteran trees priority wider measures mapping

Map reference	**WTH5.1**	Strategy principle	**Better**
Wider measure	**Appropriate and targeted management of ancient woodland, in order to retain and enhance specific features of ancient woodland and enhance biodiversity.**		
Mapping method	Mapped to the Ancient Woodland Inventory only, where status is Ancient Semi-Natural Woodland.		
Data used	- Natural England Ancient Woodland Inventory (2024)		
Explanation for method adopted and any exclusions	Mapped to extent of habitat.		

Map reference	**WTH5.2**	Strategy principle	**Better**
Wider measure	**Establishment of wide buffer zones around ancient woodland that are linked to hedgerows, to extend habitat connectivity.**		
Mapping method	Identifies buffer zones around ancient woodlands (75m buffer) that intersect with areas of potential woodland connectivity and bottlenecks.		
Data used	- Natural England Ancient Woodland Inventory (2024) - Natural England Priority Habitat Inventory: Lowland Mixed Deciduous Woodland (2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Based on general eligibility criteria for the England Woodland Creation Offer (EWCO) for areas that use natural colonisation, which requires sites to be within 75 metres of a viable seed source of at least 2 tree species. Allocated sites and urban areas excluded on basis that they offer limited opportunity for the measure.		

Hedgerows priority wider measures mapping

Map reference	**WTH8.1**	Strategy principle	**Better**
Wider measure	**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.**		
Mapping method	Mapped to existing hedgerows.		
Data used	- CEH Hedgerow (2024)		
Explanation for method adopted and any exclusions	Mapped to extent of habitat.		

Map reference	**WTH8.2**	Strategy principle	**Bigger**
Wider measure	**Buffer hedgerows with grass margins, scrub and headlands.**		
Mapping method	Hedgerows buffered by 4m.		
Data used	- CEH Hedgerow (2024)		
Explanation for method adopted and any exclusions	Mapped to extent of habitat.		

Map reference	**WTH8.3**	Strategy principle	**Connected**
Wider measure	**Strategic siting of new and extended hedgerows to aid habitat connectivity and support species forage, shelter and movement; restore links to copse and woodland.**		
Mapping method	Mapped to areas where woodland connectivity was required.		
Data used	- Natural England Priority Habitat Inventory: Lowland Mixed Deciduous Woodland (2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - Adopted allocations (Kent Wildlife Trust and Kent Local Authorities data, 2024-25)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Allocated sites and urban areas excluded on basis that they offer limited opportunity for the measure.		

Rivers (naturalising) priority wider measures mapping

Map reference	**FW1.1**	Strategy principle	**Better**
Wider measure	**Monitor, manage, control expansion and remove invasive species from ponds, lakes, wetlands, rivers and streams and lowland drains.**		
Mapping method	Invasive species (INNS count of spp per monad) records overlayed with Priority Habitat Inventory freshwater habitat, buffered by 10m.		
Data used	- Invasive species (INNS count of spp per monad) (Kent & Medway Biological Records Centre, 2024) - Natural England Priority Habitat Inventory: freshwater habitats (2024)		
Explanation for method adopted and any exclusions	Mapped to extent of habitat where invasive species are a known risk.		

Map reference	**FW1.5**	Strategy principle	**Connected**
Wider measure	**Increase longitudinal connectivity in rivers by removing redundant barriers and making remaining barriers passable for fish, riverine mammals and natural sediment.**		
Mapping method	Buffered the AMBER Barrier Atlas by 10m.		
Data used	- The Rivers Trust Barrier Atlas (2024)		
Explanation for method adopted and any exclusions	The AMBER Barrier Atlas is a comprehensive map of instream barriers in European rivers. Barrier data to fish were compiled from existing databases and were ground-truthed by field surveys in England, Scotland and Wales.		

Map reference	**FW1.6**	Strategy principle	**Connected**
Wider measure	**Support the delivery of protected freshwater sites restoration plans, through addressing drought and water quality impacts across the wider catchment.**		
Mapping method	Identified detailed watersheds (from Overland Flow Pathways) that intersect with river segments (from OS Open Rivers) within Sites of Special Scientific Interest .		
Data used	- Environment Agency Overland Flow Pathways (2024) - Ordnance Survey Open Rivers (2023) - Sites of Special Scientific Interest (Natural England, 2025)		
Explanation for method adopted and any exclusions			

Rivers (clean) priority wider measures mapping

Map reference	**FW2.1**	Strategy principle	**Better**
Wider measure	**Discharge agricultural land drains into interception features in buffers, rather than the stream network.**		
Mapping method	200m buffer around the river network where it intersects with arable and horticultural land.		
Data used	- CEH Arable and horticulture (2024) - Ordnance Survey Open Rivers (2023)		
Explanation for method adopted and any exclusions			

Map reference	**FW2.2**	Strategy principle	**Bigger**
Wider measure	**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.**		
Mapping method	50m buffer around river network where land cover will allow for interception features.		
Data used	CEH Inland rock, Urban, Freshwater, Suburban, Saltwater (2024) Ordnance Survey MasterMap Water Network Layer (2025) Natural England Priority Habitat Inventory (2024)		
Explanation for method adopted and any exclusions			

Map reference	**FW2.3**	Strategy principle	**Nature-based solutions**
Wider measure	**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.**		
Mapping method	10m buffered points of treated sewage discharge into land/ infiltration system.		
Data used	- Treated Sewage Discharge (Rivers Trust, 2023)		
Explanation for method adopted and any exclusions			

Map reference	**FW2.5**	Strategy principle	**Nature-based solutions**
Wider measure	**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.**		
Mapping method	Land cover where natural flood management or sustainable drainage systems may be utilised in Watersheds where combined storm overflows are present.		
Data used	- Natural England Priority River Habitat: Headwater Areas (2024) - Rivers Trust Storm overflow (2024) - CEH Urban, Suburban (2024)		
Explanation for method adopted and any exclusions			

Rivers (supply) priority wider measures mapping

Map reference	**FW3.1**	Strategy principle	**Better**
Wider measure	**Safeguard rivers, chalk streams and freshwater habitats in county most sensitive to low water levels through measures to reduce abstraction and water use in catchment**		
Mapping method	Intersection to locate areas within watersheds and priority habitats where groundwater vulnerability to pollution is high and water resources are at risk.		
Data used	- Natural England Priority River Habitat: Headwater Areas (2024) - Water resource availability and extraction reliability (Environment Agency, Defra, 2024) - Natural England Priority Habitat Inventory (v.3) (2024)		
Explanation for method adopted and any exclusions			

Headwater streams priority wider measures mapping

Map reference	**FW5.1**	Strategy principle	**Better**
Wider measure	**Safeguard headwater streams from agricultural pollution, erosion, and road runoff through the use of semi-natural buffer strips and interception features.**		
Mapping method	Identified areas where headwaters overlap with vulnerable soil types that are prone to pollution runoff, rapid water through-flow, and erosion.		
Data used	- Natural England Priority River Habitat - Headwater Areas (2024) - Cranfield Soil data (2024)		
Explanation for method adopted and any exclusions	Soil type used as indicator of areas of headwater most likely at risk from polluting runoff.		

Ponds and lakes priority wider measures mapping

Map reference	**FW6.1**	Strategy principle	**Better**
Wider measure	**Restore ghost ponds, including restoration of dew ponds and dip slope ponds, hammer and furnace ponds.**		
Mapping method	Combined Great Crested Newt areas within wetlands.		
Data used	- Permanently wet areas ('Watersystems maps' from the University of Antwerp from a project called PROWATER, 2024) - Natural England Great Crested Newt - Strategic Opportunity Areas (England) (2024)		
Explanation for method adopted and any exclusions	Used known strategic sites that benefit a Strategy Priority Species that fell within wet areas suitable for restoration of ghost ponds.		

Map reference	**FW6.2**	Strategy principle	**Bigger**
Wider measure	**Enhance lakes to include a mosaic of habitats and watercourses.**		
Mapping method	Identified areas around lakes and priority ponds that are within 100m of river (within 100 meters) and not located in urban, suburban, or inland rock land cover types.		
Data used	CEH Urban, Suburban, Inland rock (2024) CEH Spatial inventory of UK waterbodies (2024) Ordnance Survey Waterbodies (2023) Ordnance Survey Priority Ponds with Survey Data (2025)		
Explanation for method adopted and any exclusions	100m buffer area recommended by Natural England. Excluded land cover types not compatible with potential measure.		

Reedbeds priority wider measures mapping

Map reference	**FW8.1**	Strategy principle	**Better**
Wider measure	**Manage reedbeds to prevent encroachment of woodland, and by managing associated ditches and dykes, conservation grazing, minimal chemical interventions, consider management of saline flooding.**		
Mapping method	Mapped to Natural England reedbeds data, where habitat is classified as Primary or Associated habitat.		
Data used	- Natural England reedbeds habitat network (2024).		
Explanation for method adopted and any exclusions	Mapped to extent of habitat.		

Freshwater wetlands priority wider measures mapping

Map reference	**FW9.2**	Strategy principle	**Bigger**
Wider measure	**Manage, restore and expand river valley wetlands, for example floodplain meadows, floodplain grazing marshes, reedbeds and mudflats.**		
Mapping method	Freshwater areas mapped to nature-based solutions of water quality and flood management		
Data used	- Kent Kent Habitat Survey: Wetlands (2012) - Wildfowl and Wetlands Trust 'Wetlands for Water Quality' potential (2024) - Environment Agency Flood Map for Planning (2018)		
Explanation for method adopted and any exclusions	Whilst wetlands provide more nature-based solutions that water quality and flood management, there were the only two provisions where reliable mapping data existed and enabled some identification of opportunity areas for the county.		

Map reference	**FW9.3**	Strategy principle	**More**
Wider measure	**Provide opportunities for spring flooding (e.g. for waders) by creating water storage areas for winter rainfall.**		
Mapping method	Mapped surface water and flood zone 3 area, excluding urban areas.		
Data used	- CEH Land Cover Map (2024) - Environment Agency Flood Map for Planning (2018) - South East Rivers Trust Surface Water (2024)		
Explanation for method adopted and any exclusions	Areas where flooding is likely to occur to create opportunities for water storage identified. Urban areas removed as not appropriate as water storage.		

Map reference	**FW9.4**	Strategy principle	**Connected**
Wider measure	**Connect existing wetlands through a mosaic of habitats.**		
Mapping method	Identified wetland connectivity areas and bottlenecks outside urban areas.		
Data used	- Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - CEH Land Cover Map: Urban and Suburban (2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Urban areas removed as not appropriate as water storage.		

Urban environment (connectivity) priority wider measures mapping

Map reference	**URB1.1**	Strategy principle	**Better**
Wider measure	**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.**		
Mapping method	All Kent County Council Conservation Verges, Roadside Nature Reserves, Bee Roads, and grassland habitat that falls within a Buglife Bee-Line areas. With manual additions from Local Planning Authorities.		
Data used	CEH Grassland habitats (improved, neutral, chalk and acidic) (2024) Roadside Nature Reserves KWT, 2023) Bee road sites and conservation verges (Kent County Council, 2023) Buglife Bee lines (2021)		
Explanation for method adopted and any exclusions	Beelines has identified areas of the county that provide a series of 'insect pathways' running through our countryside and towns that link existing wildlife areas, along which efforts should be targeted to restore and create a series of wildflower-rich habitat stepping stones. This was used as the basis for prioritisation for this wider measure.		

Map reference	**URB1.2**	Strategy principle	**Connected**
Wider measure	**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.**		
Mapping method	Mapped every non-developed land parcel within 2km of a major urban area that falls within an area outlined for connectivity. Urban and suburban areas (CEH data), such as buildings, were removed. Some areas identified by landowners and local planning authorities were manually removed.		
Data used	- CEH Urban and suburban areas (2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - Major Urban Areas (Office for National Statistics 2021) supplemented with additional date from Local Planning Authorities.		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Developed areas not included as covered by wider measure URB1.3.		

Map reference	**URB1.3**	Strategy principle	**Connected**
Wider measure	**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.**		
Mapping method	Every developed land parcel within 2km of a major urban area falls within an area outlined for connectivity.		
Data used	- CEH Urban and Suburban areas (2024) - Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024) - Major Urban Areas (Office for National Statistics 2021) supplemented with additional date from Local Planning Authorities.		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation).		

Urban environment (nature-based solutions) priority wider measures mapping

Map reference	**URB3.1**	Strategy principle	**Nature-based solutions**
Wider measure	**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.**		
Mapping method	Areas outlined for woodland creation by the England Woodland Creation offer that fall within either: - high air pollution areas (PM2.5, PM10 or NO2) - areas that could offset NH3 emissions - areas outlined to cool waterways - areas on floodplains outlined for woodland flood management.		
Data used	- Forestry Commission England woodland creation low sensitivity map v4.0 (2023) - Environment Agency Working with Natural Processes: Riparian Woodland Potential (2015) - Forestry Commission England Woodland Creation Offer: Keeping Rivers Cool Riparian Buffers (2023) - NO2 data and other pollution data (Defra, 2023) - Forestry Commission England Woodland Creation Offer: NfC Ammonia Emissions Capture for SSSI Protection (2023)		
Explanation for method adopted and any exclusions	Utilised existing mapping and data that identifies areas of need for wider measure's nature-based solutions.		

Map reference	**URB3.2**	Strategy principle	**Nature-based solutions**
Wider measure	**Prioritise the use of natural flood management/nature based solutions over engineered, hard solutions, to manage areas at high risk from surface water flooding.**		
Mapping method	Major urban areas that fall within flood zones.		
Data used	- Major Urban Areas (Office for National Statistics 2021) supplemented with additional date from Local Planning Authorities. - Environment Agency Flood Map for Planning (2018)		
Explanation for method adopted and any exclusions			

Map reference	**URB3.3**	Strategy principle	**Nature-based solutions**
Wider measure	**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.**		
Mapping method	All built-up areas within an urban environment.		
Data used	- Major Urban Areas (Office for National Statistics 2021) supplemented with additional date from Local Planning Authorities. - Ordnance Survey Built up areas (2022)		
Explanation for method adopted and any exclusions	Unable to map beyond built-up areas, as no heat island datasets currently exist for Kent and Medway.		

Map reference	**URB3.4**	Strategy principle	**Nature-based solutions**
Wider measure	**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.**		
Mapping method	All areas in the urban environment that are within the most deprived 40% of the country and also fail the Accessible Greenspace (ANGST) standards.		
Data used	- Major Urban Areas (Office for National Statistics 2021) supplemented with additional date from Local Planning Authorities. - IMD (Consumer Data Survey Centre, 2024) - ANGST Analysis (KMBRC, 2025)		
Explanation for method adopted and any exclusions	Determined that areas which are most deprived AND do not meet accessible greenspace standards (access to sites of at least two hectares within 300 metres), should be prioritised for this action.		

Open coast and estuaries priority wider measures mapping

Map reference	**CL1.1**	Strategy principle	**Better**
Wider measure	**Where hard defences must remain, apply the "greening the grey" approach, softening edges to encourage wildlife.**		
Mapping method	All Environment Agency hard flood defences mapped within 1km of the high water line.		
Data used	- Environment Agency Asset Information and Maintenance Programme: Spatial Flood Defences (2020)		
Explanation for method adopted and any exclusions			

Map reference	**CL1.2**	Strategy principle	**Better**
Wider measure	**Refuges for wildlife created with access managed to reduce disturbance.**		
Mapping method	Mapped to beach nesting sites, frontages, and roost site data. Additional bird nesting sites from specialists in the county were added manually.		
Data used	- Thanet Roost Sites (Thanet Council, 2024) - RSPB Beach nesting sites (2024) - Environment Agency Medway Estuary and Swale managed realignment frontages (2024)		
Explanation for method adopted and any exclusions			

Map reference	**CL1.5**	Strategy principle	**Connected**
Wider measure	**Hard defences removed where appropriate to enable reconnection of fragmented habitats through managed realignment.**		
Mapping method	Mapped to Asset Information and Maintenance Programme: Spatial Flood Defences, including: bridge abutments, flood gates, quays, spillway, and walls.		
Data used	Environment Agency Asset Information and Maintenance Programme: Spatial Flood Defences (2020)		
Explanation for method adopted and any exclusions	Mapped extent of hard defences.		

Saltmarsh and mudflats priority wider measures mapping

Map reference	**CL2.1**	Strategy principle	**Better**
Wider measure	**Maintain high tide roosts and nesting sites, with key sites fenced off, to limit disturbance and safeguard inland feeding, breeding and overwintering areas.**		
Mapping method	Mapped to beach nesting sites, frontages, and roost site data. Additional bird nesting sites from specialists in the county were added manually.		
Data used	- Thanet Roost Sites (Thanet Council, 2024) - RSPB Beach nesting sites (2024) - Environment Agency Medway Estuary and Swale managed realignment frontages (2024)		
Explanation for method adopted and any exclusions			

Map reference	**CL2.4**	Strategy principle	**Connected**
Wider measure	**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.**		
Mapping method	Areas of low connectivity, and bottlenecks, for wetlands within 1km of the high water line. Known sites not identified by mapping data manually included.		
Data used	- Connectivity modelling for Kent & Medway Local Nature Recovery Strategy (Kent & Medway Biological Records Centre, 2024)		
Explanation for method adopted and any exclusions	Mapping utilised Condatis for all its connectivity mapping work. Condatis is a decision support tool to identify the best locations for habitat creation and restoration to enhance existing habitat networks and increase connectivity across landscapes. It also pinpoints bottlenecks in the habitat network (where there are restricted opportunities for colonisation). Wetlands within 1km of the high water line represent potential areas for the creation of new wetland habitats.		

Chalk cliffs and reef communities priority wider measures mapping

Map reference	**CL4.1**	Strategy principle	**Better**
Wider measure	**Management of problematic non-native species.**		
Mapping method	All monads with at least 1 record of an invasive non native species that intersect with the high water line, within a Special Area of Conservation.		
Data used	- Invasive species (INNS count of spp per monad) (KMBRC, 2000) - Special Area of Conservation (Natural England, 2025)		
Explanation for method adopted and any exclusions			

Map reference	**CL4.2**	Strategy principle	**Better**
Wider measure	**Control leisure boat and other recreational activity in chalk reef areas**		
Mapping method	All Annex I habitat 'Reef' in Kent waters, within a Special Area of Conservation.		
Data used	- Joint Nature Conservation Committee Annex I Reefs in UK offshore waters (Public) (2019) - Special Area of Conservation (Natural England, 2025)		
Explanation for method adopted and any exclusions			

Coastal wildlife disturbance priority wider measures mapping

Map reference	**CL9.1**	Strategy principle	**Better**
Wider measure	**Develop zoned recreational areas that limit, restrict or prevent leisure activities which can disturb wildlife and damage sensitive habitats; safeguard offshore islands.**		
Mapping method	Combining Sandwich & Pegwell Bay and Castle Coote.		
Data used	- Castle Coote data (Natural England, 2024)		
Explanation for method adopted and any exclusions	Both are within SSSI/SPA sites and are existing areas with no access. The Sandwich and Pegwell Bay one includes a large area and is a mix of intertidal mud, saltmarsh and sand dunes, so its designed to protect a range of species and their activities. Castle Coote is a smaller and is more targeted to protecting shorebird nesting sites and an important high tide roost.		

Map reference	**CL9.2**	Strategy principle	**Bigger**
Wider measure	**Building up of existing and creation of new seal haul out sites, which are adequately managed to provide safe areas for them.**		
Mapping method	Mapped to areas of known seal haul out sites.		
Data used	- ZSL Grey and Harbour seal sites (2024) - Seal haul-out sites in Pegwell Bay (Kent Wildlife Trust, 2025)		
Explanation for method adopted and any exclusions	Mapping limited to available data.		