Medway Green and Blue Infrastructure Framework

Consultation Draft July 2024

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Introduction

About this Framework

Medway's Green and Blue Infrastructure Framework sets out Medway's strategic network of green and blue infrastructure. It provides an assessment of the needs and opportunities, strategic priorities and future actions.

The framework takes a multi-functional and cross boundary approach to green infrastructure planning. Although this evidence base is presented in themes, an important aspect of green infrastructure planning is to take a multidisciplinary approach and to seek opportunities which address issues across many areas.

In Part 1 of the framework five evidence areas are described and assessed. These are:

- Biodiversity, trees and woodlands;
- Access, recreation and active travel;
- Health and wellbeing;
- Blue infrastructure and the coast;
- Landscape character and heritage.

The areas of the district are also described in more detail:

- Hoo Peninsula;
- Urban Medway;
- Lower Rainham and Meresborough;
- Three Valleys – Horsted, Princes Park and Capstone;
- Cuxton and Halling; and
- The River Medway.

Workshops to explore green and blue infrastructure priorities were held with stakeholders and local councils in March 2019. A Medway Green and Blue Infrastructure Vision was also produced in 2019 and consulted on with stakeholders. The findings from the workshops and the consultation responses have been taken into account in this Framework.

What is Green and Blue Infrastructure?

Many environmental features make up green infrastructure (see below), including water environments (termed 'blue infrastructure'). A key feature of green infrastructure is that networks are strategically planned and that spaces and places are connected. Some green infrastructure is publicly accessible, but it does not need to be accessible to be valuable.

Each component part of green infrastructure has the potential to deliver wider benefits (functions), including recreation, biodiversity, health, climate change mitigation and adaptation and water quality (termed 'multi-functionality'). When planned, designed and managed as a network, these benefits are maximised.

Green and blue infrastructure networks cross local authority boundaries and this framework considers biodiversity, strategic access routes, watercourses and other green and blue infrastructure across neighbouring authority boundaries.

What is Green Infrastructure?

- Natural and semi-natural rural and urban green spaces – including woodland, scrub, grassland, heath, wetland and open and running water (blue infrastructure), brownfield sites, coasts;
- Parks and gardens – urban parks, country parks, formal and private gardens, institutional grounds (e.g. schools and hospitals);
- Amenity green space –recreation spaces, play areas, outdoor sports facilities, community and roof gardens, village greens, commons, hedges, civic spaces, highway trees and verges;
- Allotments, city farms, orchards and farmland;
- Cemeteries and churchyards;
- Green corridors – rivers, canals, road verges, rail embankments, cycling routes, rights of way;
- Nature conservation sites – Designated sites and statutory and non-statutory Nature Reserves;
- Green space designations (selected for historic significance, beauty, recreation, wildlife, or tranquillity);
- Archaeological and historic sites;
- Functional green space such as sustainable drainage schemes (SuDS) and flood storage areas;
- Built structures – living roofs and walls, bird and bat boxes, roost sites.

Abridged from: Town & Country Planning Association and The Wildlife Trusts (2012), *Planning for a Healthy Environment – Good Practice Guidance for Green Infrastructure and Biodiversity*.

Rochester Cathedral

National and Local Policy

National Planning Policy Framework 2023

Positive planning for green infrastructure is a requirement of the National Planning Policy Framework (NPPF). Paragraph 20 of the NPPF sets out that strategic planning policies should:

"set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for … d) conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation."

Furthermore, green and blue infrastructure planning should:

" *… take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries*." (paragraph 181).[1]

The NPPF also sets out that green and blue infrastructure planning should include delivery of measures to address local health and wellbeing needs, climate change adaptation and air quality issues.[2]

Trees are recognised as making an important contribution to the character and quality of urban environments and how they can also help mitigate and adapt to climate change. Paragraph 136 states that "planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible."

Environment Act 2021

The Environment Act covers targets, plans and policies for improving the natural environment across a wide range of areas including, environmental reporting, air quality, water, nature and biodiversity and conservation covenants.

The Act has brought in a raft of new requirements for planners and decision-makers in councils in relation to nature and biodiversity. The changes of greatest significance to this framework are detailed.

Biodiversity Net Gain

Biodiversity net gain (BNG) is a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') on biodiversity, compared to what was there before development Biodiversity net gain, as set out in the Environment Act, is mandatory in England from February 2024, under Schedule 7A of the Town and Country Planning Act 1990 (TCPA as inserted by Schedule 14 of the Environment Act 2021.

Developers must deliver a BNG of at least 10% on the following principles:

- Minimum 10% gain required calculated using Biodiversity Metric and approval of net gain plan;

- Habitat secured for at least 30 years via obligations / conservation covenants;
- Habitat can be delivered on-site, off-site or via statutory biodiversity credits;
- There is a national register for net gain delivery sites;
- The mitigation hierarchy - avoidance, mitigation and compensation for biodiversity loss - still applies.

Local Nature Recovery Strategies

Local Nature Recovery Strategies are a new system of spatial strategies for nature. These will identify the opportunities and priorities for enhancing biodiversity and supporting wider objectives such as mitigating or adapting to climate change in an area. Kent, including Medway, is currently developing a county Local Nature Recovery Strategy through the Kent Nature Partnership, Making Space for Nature. The Local Nature Recovery Strategy will:

- Map the most valuable existing habitat for nature
- Map specific proposals for creating or improving habitat for nature and wider environment goals; and
- Agree priorities for nature's recovery.

Local Nature Recovery Strategies guide delivery of biodiversity net gain and other nature recovery measures by helping developers and planning authorities avoid the most valuable existing habitat and focus habitat creation or improvement to achieve the best outcomes.

Species Conservation and Protected Site Strategies

A Species Conservation Strategy is a new mechanism to safeguard the future of particular species at greatest risk, building on the existing district level licensing approach for great crested newts. A Protected Site Strategy will seek to achieve a similar purpose in respect of protected sites.

These strategies intend to provide a strategic approach to protecting and restoring species and habitats. The measures place a new duty on local planning authorities to cooperate with Natural England and other local planning authorities and public bodies to establish and implement the strategies, will link to Local Nature Recovery Strategies and will complement plans for biodiversity net gain.

Strengthened Biodiversity Duty

The current duty on public authorities[3] to have regard to the conservation of biodiversity has been strengthened to conserve and enhance. This will create an expectation that authorities will look strategically at their policies and operations at least every 5 years and assess what action they can take 'to further' the conservation and enhancement of biodiversity. They must also have regard to the relevant Local Nature Recovery Strategies, Species Conservation Strategies and Protected Sites Strategies and should produce a Biodiversity Report.

Duty to Consult – Trees

The Environment Act amends the Highways Act 1980, introducing a statutory duty on local highway authorities to consult with residents and

communities on the felling of street trees where no exemptions apply. The duty balances the need to provide all residents with free and unhindered use of the highway while at the same time ensuring good-quality and healthy trees are retained for all the benefits they bring to the local area, even when they may be causing minor, but resolvable, issues with their surroundings.

The purpose of the duty is to ensure greater transparency and accountability to the community on the part of local authorities in how they manage and care for the street trees under their control.

Other Relevant National Policy

England Trees Action Plan (2021-24) –. Recognises how trees will play an important role in helping us adapt to a warmer world; manage water quality and flood risk; and in our towns to provide shade. It emphasises the need to plant and establish the right tree in the right place, for the right reasons to deliver benefits for people, for wildlife and the economy, and in obtaining expert advice. It sets out a vision for trees, woodlands and forests in England, which includes targets such as 12% woodland cover target by mid-century and the mapping of smaller areas of Ancient Woodland of 0.25 hectares.

Environmental Land Management Schemes – These schemes are being revised following the UK's exit from the Common. These schemes include 'Farming in Protected Landscapes' through which landowners get funding to support and improve Areas of Outstanding Natural Beauty.

25 Year Environment Plan (2018) and its revision in the Environment Improvement Plan (2023) – This sets out the Government's intended actions to help the natural world regain and retain good health. The 2023 Improvement Plan reports on the progress made against the ten core goals in the 2018 Plan, It aims to deliver cleaner air and water in cities and rural landscapes, protect threatened species and provide richer wildlife habitats. Chapter 3, 'Connecting people with the environment to improve health and wellbeing', sets out ambitions for green infrastructure:

- Creating more green infrastructure
- Focus on accessible green infrastructure and links to communities and health and well-being
- Framework of Green Infrastructure Standards
- Local authorities to assess green infrastructure against new standards
- Accessible greenspaces in areas which lack greenspace
- Incorporate 25 Year Environment Plan into national planning guidance and policy

Green Infrastructure Standards – The development of Green Infrastructure Standards was a core commitment of the 25 Year Environment Plan. Natural England has now developed a National Framework of Green Infrastructure Standards.

Local Policies and Strategies

This framework has been informed by many Medway Council and other strategies (see Bibliography for full list). Particular strategies of note include:

One Medway Council Plan, 2024/28 – this sets the council's priorities for communities, health and wellbeing, the environment and economy.

Joint Health and Wellbeing Strategy for Medway 2024 – 2028 – This sets out actions to reduce health inequalities in Medway. The environment and the opportunity for access to green space for to support good physical and mental health are prioritised in the strategy.

Medway's Cultural Strategy (2020-30) – Green spaces, public realm, built and natural heritage all shape the identity of Medway and help to make Medway unique. The cultural strategy recognises the importance of the stewardship of these cultural assets and the role they play in the economic, health and social wellbeing of Medway. Linking Medway's rich cultural life with green and blue infrastructure can bring innovative and creative ways to bring these places to life and broaden the range of people engaged with them.

Air Quality Action Plan (2015) and Four Elms Hill AQAP (2022) – There are four Air Quality Management Areas in Medway. Promoting cycling and walking are important actions to decrease traffic and congestion and improve air quality. Green infrastructure can also help to mitigate air pollution and make spaces more attractive for non-vehicle travel.

Medway 2035 – Medway 2035 is Medway's regeneration strategy. Its ambitions for the regeneration of Medway include preserving, enhancing and celebrating Medway ecology, green spaces, river, culture and heritage. It sets out ambitions for significant riverside regeneration projects, vibrant town centres with improved public realm and revitalised business accommodation.

Climate Change Action Plan– In 2019, Medway Council declared a Climate Emergency and committed to developing a Climate Change Action Plan. The current version of the plan can be found at www.medway.gov.uk/climatechange. The plan acknowledges the importance of green and blue infrastructure in supporting Medway to be resilient to the impacts of climate change. Addressing climate change is considered a priority throughout the strategy.

Development and the Local Plan

Local Plan

Medway Council is preparing its new Local Plan, setting out the strategy for Medway's growth up to 2041. It provides direction for investment in homes, jobs and services, and policies to protect and

enhance what makes Medway special and to deliver quality development that benefits our communities and respects the environment. The Local Plan provides the framework to shape future growth.

The Plan addresses the challenges of providing for high levels of housing need – over 28,000 new homes by 2041, supporting economic growth.
emerging plan recognises the important contribution of green and blue infrastructure in delivering the vision and strategic objectives for Medway.

On the Hoo Peninsula a Strategic Environmental Management Scheme (SEMS) was developed to deliver large scale new open spaces, managed for both wildlife and for access. This will be in addition to new parks, playgrounds, allotments and sports pitches that will be provided through new residential development. The SEMS included the following new green infrastructure:

- Cockham Community Parkland - 127 acres of farmland converted into new habitats including grasslands, new hedges and woodland planting, plus the creation of new path networks and two car parks;
- Land at Deangate Ridge - creation of over 6km of new access routes and the planting of nearly 5ha of woodland and scrub;
- New wetlands are being proposed to support the establishment of habitat for both breeding wading birds plus over-wintering wetland birds;
- The provision of safe pedestrian access across the A228 between the community of Hoo and Deangate Community Parkland.

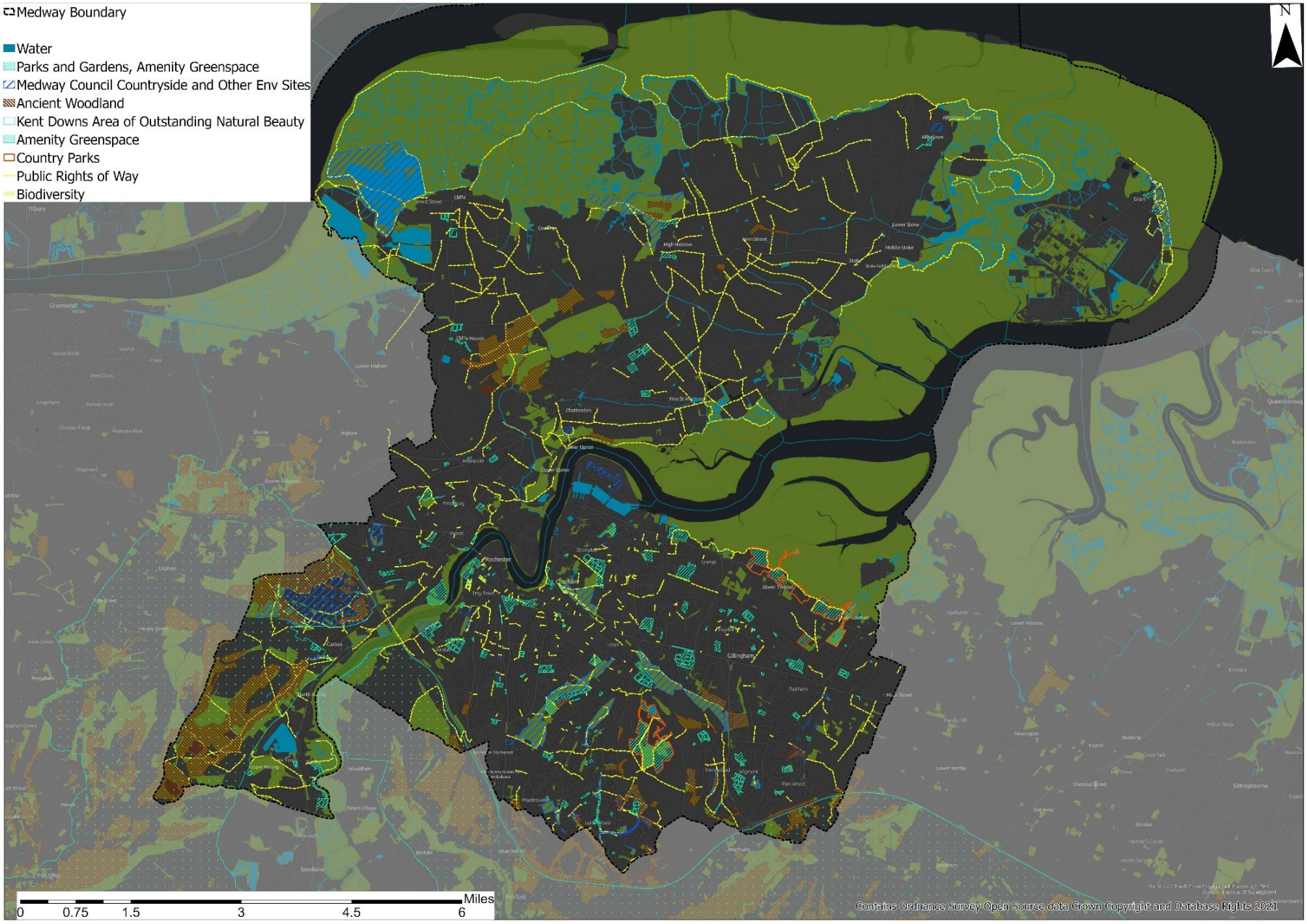
Whilst funding to deliver all of SEMS is now not available the principle of mitigation to offset the impact of new developments on protected habitats still stands.

Neighbourhood Plans

There are two adopted, or ‘made’’ neighbourhood plans in in Medway – Cliffe and Cliffe Woods and Arches (Chatham). Plans are in preparation in High Halstow, Hoo St Werburgh and Chattenden, and Frindsbury Extra. All the plans seek to protect and enhance the local environment and recognise the benefits of green and blue infrastructure for their residents. Once approved, the neighbourhood plans provide planning policy alongside the Medway Local Plan.

Site of the potential Cockham Community Parkland

Overview of Medway's Green and Blue Infrastructure Network



Strategic Priorities

Protect, enhance and improve the core biodiversity sites and take action for priority species.

Create an ecologically resilient network to join habitats, allow species to move and to help nature adapt to climate change.

Link people and nature.

Ensure that greenspace provision keeps pace with population growth and provides for Medway's future residents.

Support increased active travel, to relieve congestion and air pollution and encourage healthy living through a strategic cycle network and walking routes.

Prioritise improving access to greenspace and creating greener communities in areas of deprivation or where there is poor or unequal access.

Providing access to green infrastructure close to home and which is inclusive for all.

Support people in taking healthy exercise.

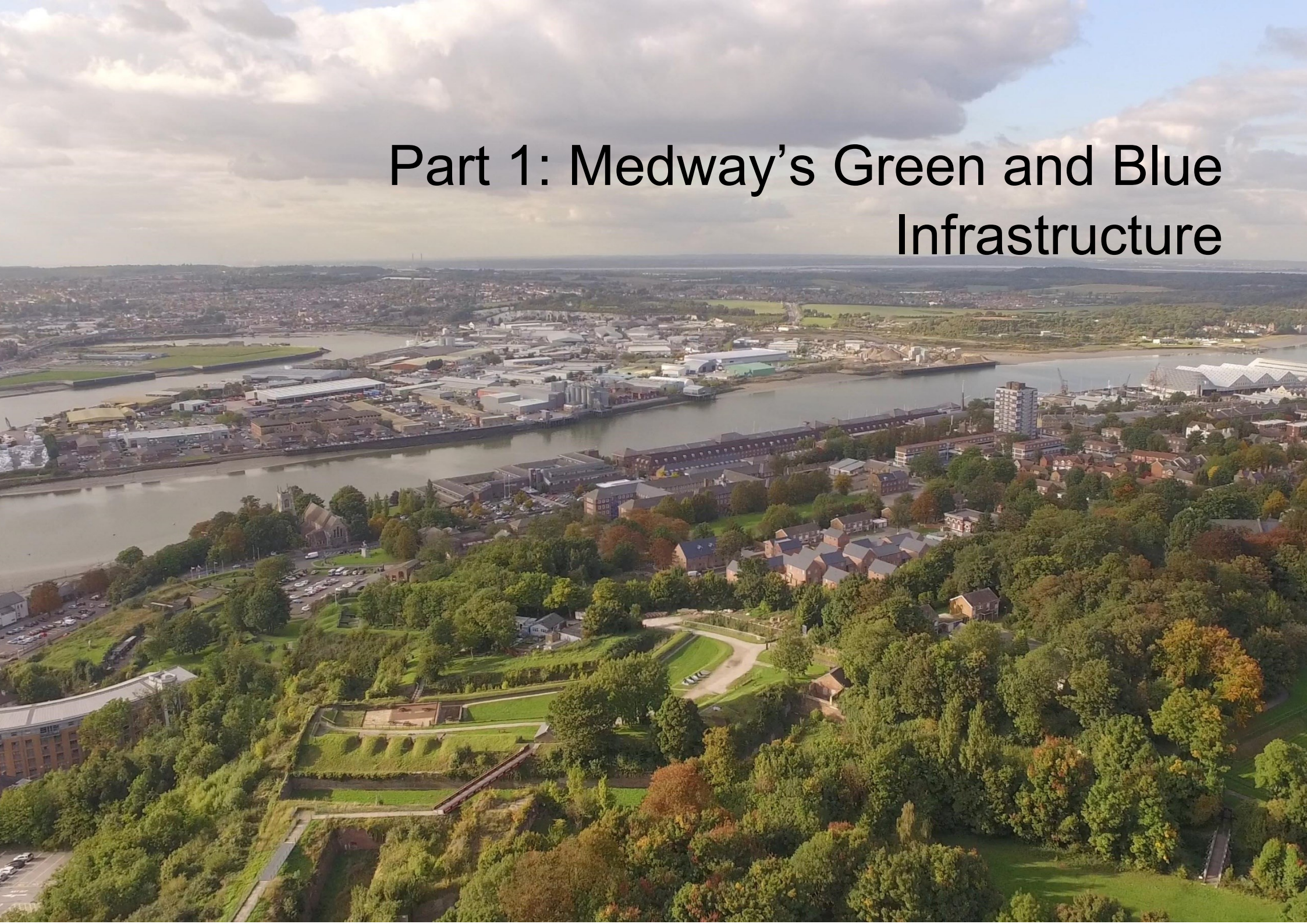
Initiate local evidence-informed research to understand the impact that accessible greenspace has on local health outcomes, especially for disadvantaged groups.

New development should try and incorporate SuDs schemes that are integral to the green infrastructure provided.

Retrofitting SuDS could potentially help solve some of the flooding risks that Medway faces now and in the future.

Strengthen landscape character and ensure green and blue infrastructure enhances and fits with local landscape character.

Ensure heritage is recognised in green infrastructure planning and interpretation.



Part 1: Medway's Green and Blue Infrastructure

Biodiversity, Trees and Woodlands

Introduction

Medway is home to outstanding biodiversity. There are expansive areas of nature conservation habitats which, in turn, support a host of rare and important species. Medway's coastal and wetland habitats are considered of international importance, whilst other habitats, including ancient woodland, ancient and veteran trees, chalk grassland and lowland meadows are of value for their nature conservation interest, with many of these being highly protected.

Blue tit on cherry tree in a Chatham park

Medway's Protected Wildlife Sites

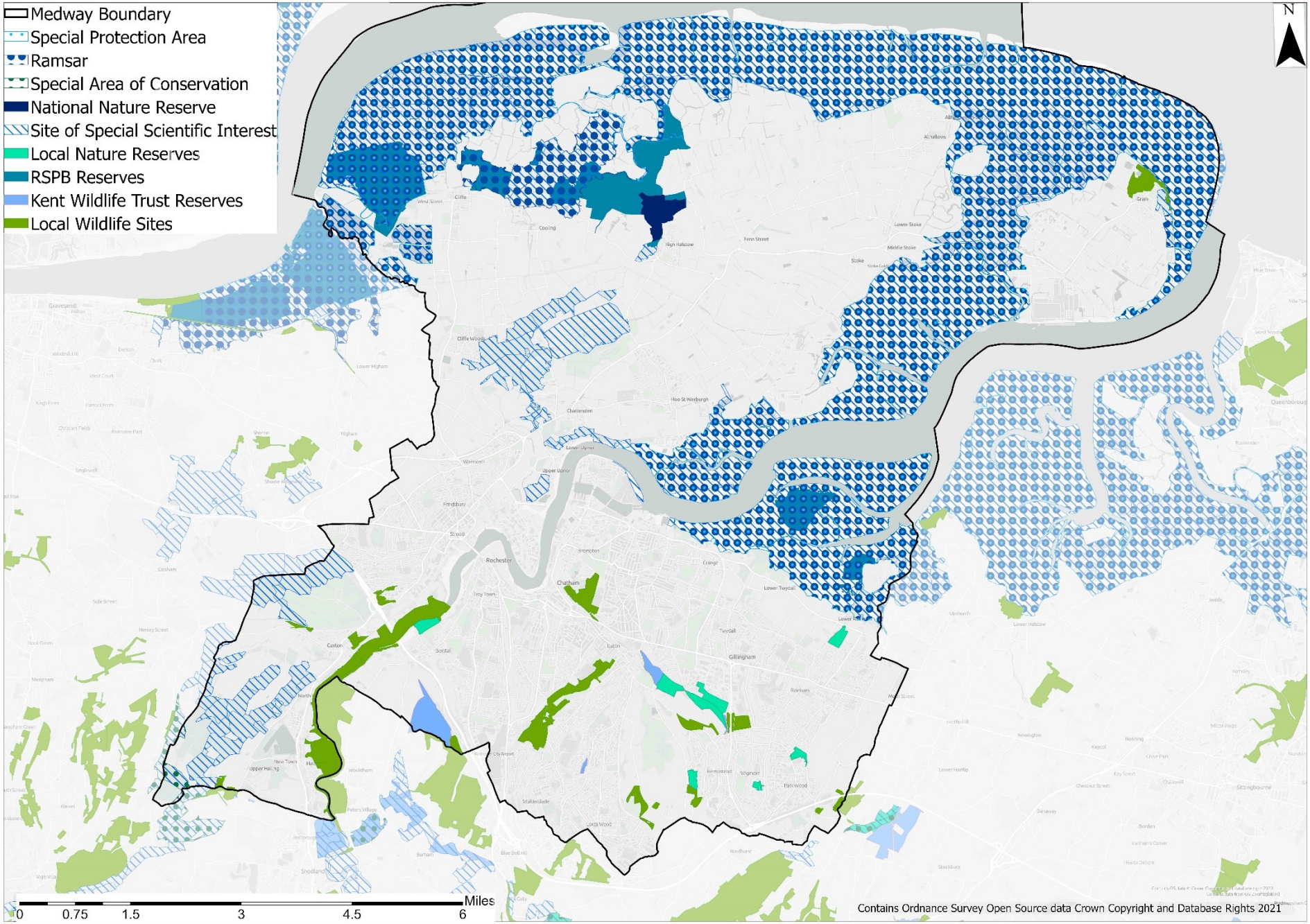
Medway's outstanding biodiversity is reflected in the high proportion of Medway which is protected under nature conservation designations. Around 30% of Medway's area, including inshore areas, is protected under a nature conservation designation. Around 26% of this is designated due to its international importance for nature.

Since 2019, around 72 square kilometres has also been protected under the Medway Estuary Marine Conservation Zone; much of which overlaps with the internationally designated sites.

Table 1: Nature Conservation Designations in Medway

Designated Sites	Area (sq km)	% of Medway Area
International Special Protection Areas (for birds), Special Areas of Conservation (for habitats) and Ramsar wetlands	69.64	26%
National Sites of Special Scientific Interest Marine Conservation Zone	78.36 71.6	29%
Local and Kent Local Nature Reserves[4] Local Wildlife Sites	0.79 4.41	0.3% 1.7%

Plan 1: Designated Nature Conservation Sites (excluding Marine Conservation Zone)



Medway's Outstanding Habitats and Species

A Rich and Diverse Coastline

Situated next to two estuaries, Medway has an outstanding coastline. The intertidal habitats are particularly important, with large areas of sediment and mudflats; the most extensive in Kent. These areas are not vegetated but support vast numbers of invertebrates. When exposed at high tide the mudflats are the feeding area for thousands of waterfowl and waders. It is for this reason the area is designated as of international importance for birds as a Special Protection Area. Where the mudflats are higher, saltmarsh develops, formed by plants which are capable of being submerged in salt water. The Peninsula also has Kent's largest area of saline lagoons at Cliffe Pools.[5]

The whole of the Medway estuary is also a Marine Conservation Zone.[6] The transition between fresh and sea water, combined with tidal movement, creates a fertile environment and a complex ecosystem. The estuary is home to scare invertebrates and is the nursery ground for many fish. This includes smelt; a highly threatened fish species and food source for birds and other fish. There are also areas of seagrass beds in shallow inshore waters. This hugely important habitat supports food for wildfowl and shelter for juvenile fish and shellfish.

Next to the coast lies coastal and floodplain grazing marsh, usually grazed by cattle or sheep. Medway has just under a quarter of this Kent BAP priority habitat.[7] There are extensive areas on the Hoo Peninsula, to the north of Cliffe and Cooling and around Allhallows and Grain.

Coastal and floodplain grazing marsh was generally reclaimed from saltmarsh and is criss-crossed with ditches, which control water levels. There are also reedbeds, another BAP habitat. These features make

Coast at Hoo

the marsh especially important for water voles, a species which has declined severely in recent years. The marshes also support waterfowl, which use both the coast and mudflats and inland area, and birds of prey such as the rare marsh harrier.

Trees and Woodlands

Trees and woodland are a vital component of Green Infrastructure and Natural Capital in Medway. They are a critical and cost-effective means of adapting to and mitigating the impact of climate change, and essential for our mental and physical health. They can improve air quality, reduce surface water flooding, mitigate the urban heat island effect, and calm traffic. They promote wellbeing by providing contact with nature. Their aesthetic and cultural values are well recognised by communities. They also support biodiversity and connect habitats together.

Whilst a significant number of trees in Medway are in private ownership, Medway Council owns and is responsible for more than 18,000 individually plotted trees growing in urban settings. For example, trees growing on streets and in parks, open spaces, car parks and cemeteries. In addition to this there are many thousands more trees growing in schools, country parks and on other land which the council owns, as well as large areas of woodland.

Woodland is not evenly spread across Medway. Some urban areas and parts of the Hoo Peninsula for example have little or no woodland at all. Most woodland is concentrated in Cuxton & Halling, Lordswood & Walderslade, Cliffe Woods, north of Capstone and north of Chattenden.

Much of the woodland in Medway is identified in the Kent Biodiversity Strategy 2020 to 2045 as Priority Habitat. Half of Medway's woodland is within a Site of Special Scientific Interest (SSSI) and approximately 693 hectares, or 47% of Medway's woodland is designated as Ancient Woodland. Natural England are currently revising the Ancient Woodland Inventory to include smaller areas of Ancient Woodland that are greater than 0.25ha in size.

Most Ancient Woodland is located on the Kent Downs above Cuxton and Halling and to the north of Chattenden. There are other clustered areas of Ancient Woodland around the Capstone Valley, in Hempstead and in Lordswood. A small area of Ancient Woodland west of Upper Halling is included in the North Downs Woodlands Special Area of Conservation in recognition of its international importance for rare beech and yew woodland.

The Woodland Trust Ancient Tree Inventory maps the oldest and most important trees in the UK. The inventory records the presence of ancient trees, veteran trees (recognised as being irreplicable habitat in the National Planning Policy Framework) and otherwise notable specimens scattered throughout Medway. There are already more than 190,000 trees listed but there are thousands more to add.

Scrub habitats are also an important habitat for another of Medway's special species, the nightingale. This species has declined by 90% in the last 50 years and the best remaining site is at Lodge Hill.

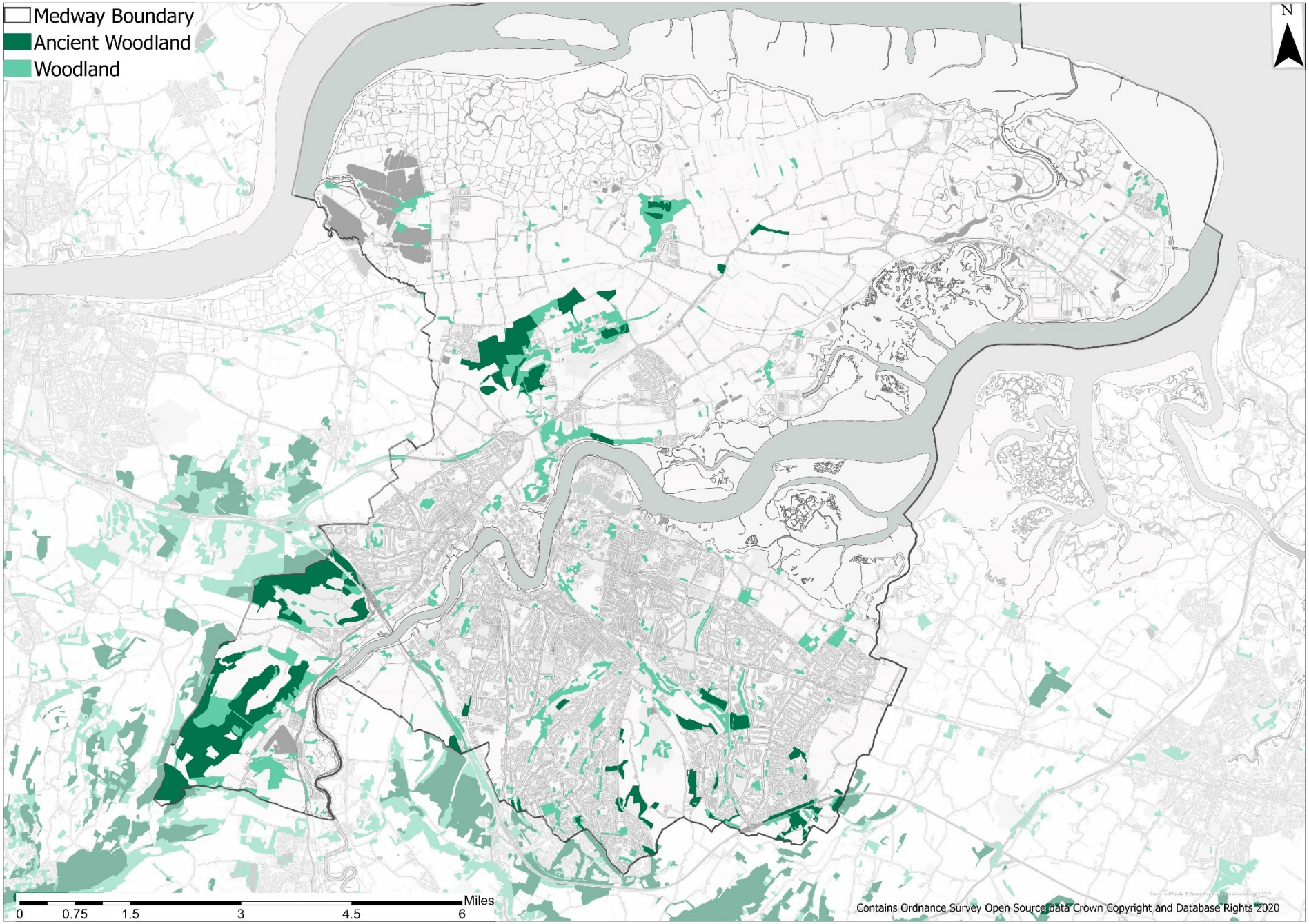
The 'Green Infrastructure Framework' published by Natural England sets out five key standards, one of which is the 'Urban Tree Canopy Cover Standard'. This standard recommends that measuring base line tree canopy cover, and monitoring increases, as the best and easiest metric for measuring success. Tree canopy cover is "the layer of leaves, branches, and tree stems that cover the ground when viewed from above" (Treeconomics, 2017).

Since 2016, no less than five tree canopy cover assessments have been conducted covering parts, or the whole of Medway by Forest Research, Kent County Council, and volunteers working on behalf of Medway Council. They have used different assessment tools that have been applied to different shaped areas.

In summary, the tree canopy cover for Medway's urban area was assessed to be 18.44% in 2018 (Forest Research); 13.4% in 2019/2020 (Kent County Council); and 21% in 2020 (Medway volunteers). Because of these differences in results, Medway has no fixed reliable dataset, and it is unable to compare surveys of tree canopy cover in Medway to assess whether there has been a decline or increase in tree canopy cover.

The England Trees Action Plan published in May 2021 recognises the need to improve the baseline level of data across England to enable us to fully understand our starting point, inform where to target our resources, and to measure success.

Plan 2: Woodland



Glorious Grasslands

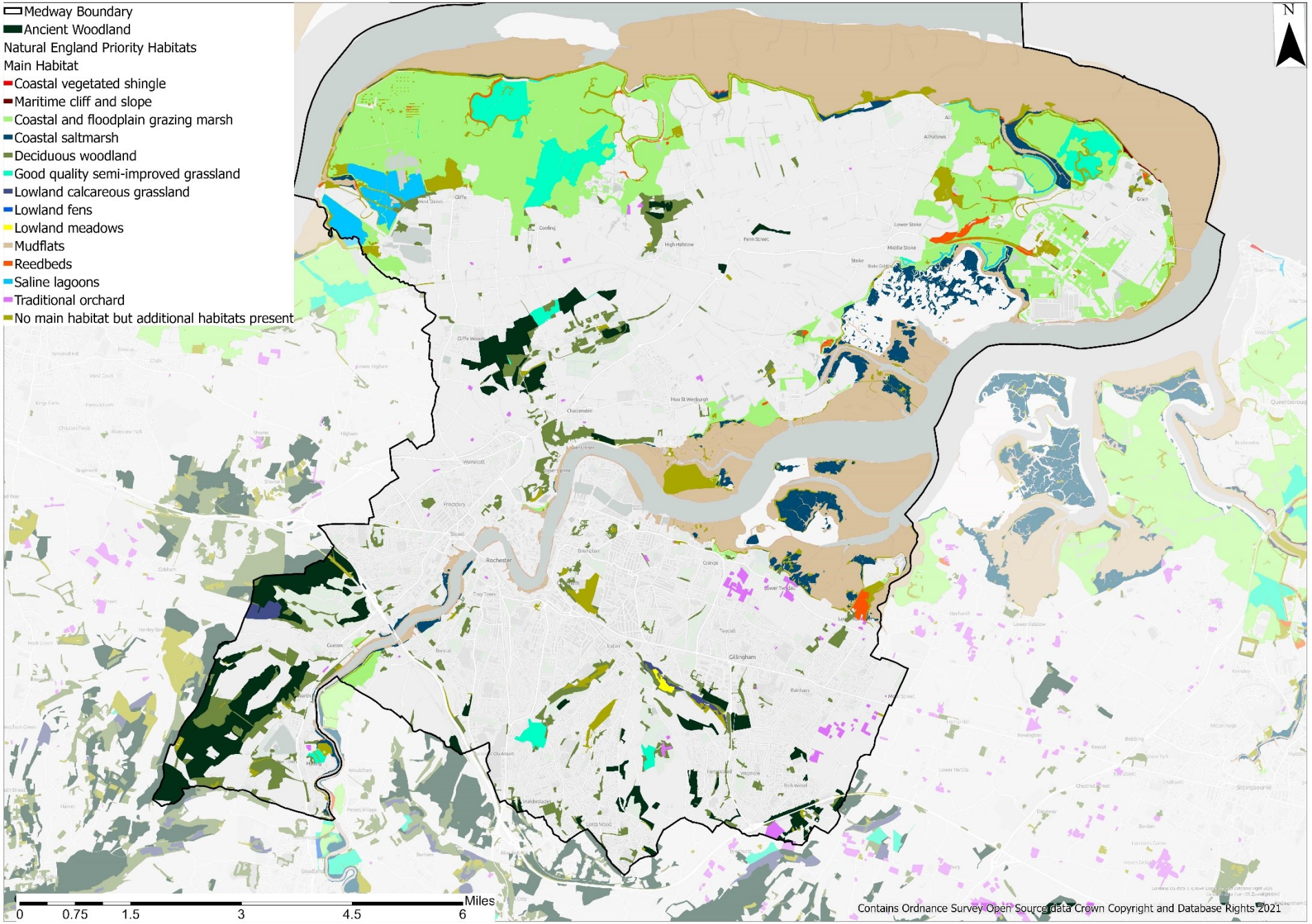
Much of Medway is grassland. Although a large proportion of this is improved for pasture, there are also some very special grasslands.

Chalk grassland is a scarce and specialised habitat. Largely confined to the chalk hills of southern England it can be very floristically diverse. It also supports a range of insects including rare and beautiful butterflies. There remain areas of chalk grassland in Medway. Several of these are within the urban area following the chalk ridges, for example at Darland Banks, managed by Kent Wildlife Trust, and Coney and Daisy Banks. There are also small areas on the Kent Downs around Cuxton and in other areas where there are chalky outcrops, for example alongside the M2. The habitat is usually maintained by sheep grazing and can be lost to scrub if sites are not managed. Preventing encroachment by scrub can be particularly difficult on urban sites where grazing is not possible.

Ranscombe Farm Reserve, near Cuxton (right), is one of the most important places in Britain for rare wildflowers, particularly arable flowers. These include corncockle, Venus's looking-glass, and blue pimpernel, as well as three types of poppies and orchids. The area has changed little in over 350 years, meaning it also supports a huge range of other wildlife, including dormouse, woodland butterflies and the elephant hawk-moth.

Ranscombe Farm

Plan 3: Priority Habitats (Natural England)



Biodiversity Networks

The review of England's wildlife sites and ecological network, 'Making Space for Nature',[8] concluded that biodiversity habitats do not form a coherent and resilient ecological network capable of responding to the challenges of climate change and other pressures.

Strategic planning for nature conservation at the landscape scale is required to manage pressures and to restore functioning ecological networks.

What is to restore functioning ecological networks is action to:

- Improve the quality of current sites by better habitat management;
- Increase the size of current wildlife sites;
- Enhance connections between, or join up, sites, either through physical corridors or through 'stepping stones';
- Create new sites; and
- Reduce the pressures on wildlife by improving the wider environment, including through buffering[9] wildlife sites;

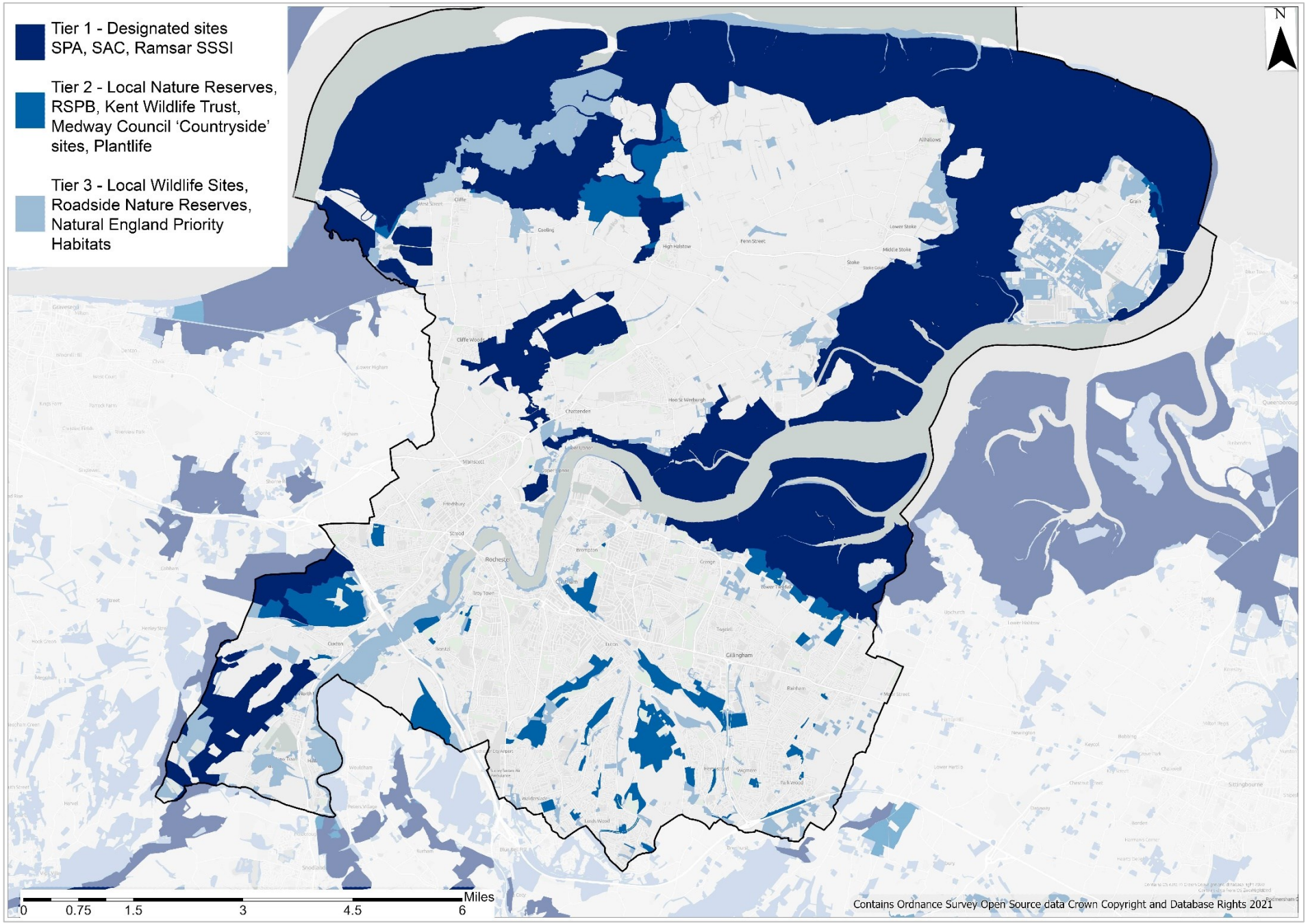
Summarised as: 'More, bigger, better and joined.'

Green infrastructure is important in supporting a landscape-scale or 'nature network' approach, through securing biodiversity value in a planned way. Green infrastructure also helps to bring nature into urban centres, which also connects people with wildlife.

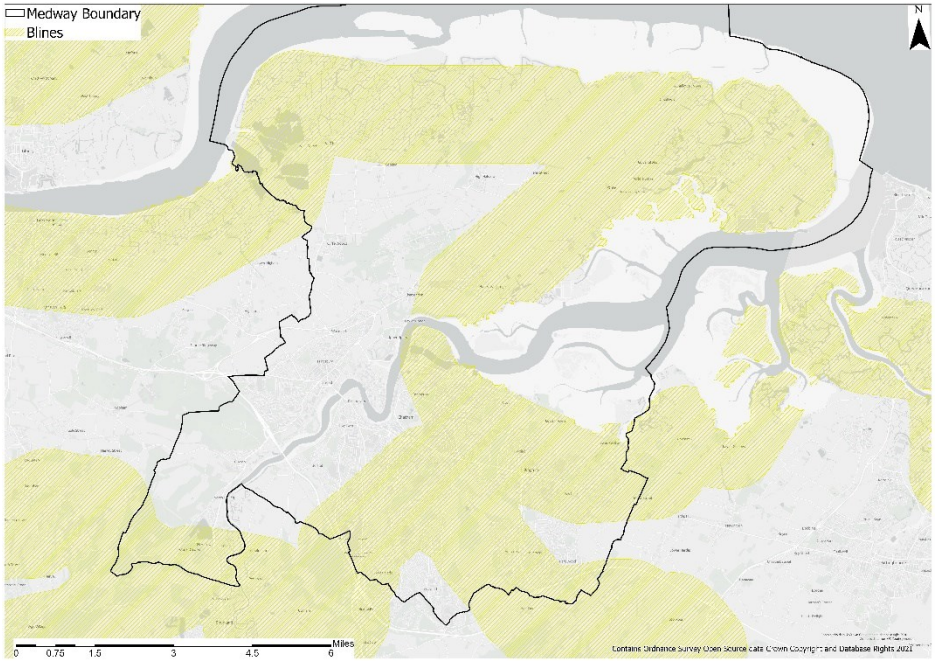
Medway's core biodiversity network is shown in Plan 4. Tier 1 sites are those designated for their national or international importance. Tier 2 includes sites which are designated for their local or county biodiversity importance or are managed for nature conservation, for example by a conservation charity. This tier also includes Medway Council owned sites with semi-natural habitat which is, or has the potential to be, in positive nature conservation management. Tier 3 are other sites which have nature conservation value. Some may be managed for nature conservation; some may not.

The concept of green and blue corridors as areas in which to improve and connect biodiversity has been supported for many years in Medway. Biodiversity Opportunity Areas also reflect the concentration of nature conservation assets, setting spatial areas in which to improve nature as a priority.[10] There are other approaches, for example B-Lines, developed by Buglife,[11] which show insect 'pathways' through town and countryside. Natural England has developed habitat network mapping based on priority habitats.

Plan 4: Medway's Core Biodiversity Network



Plan 5: Buglife 'B-Lines' show opportunities to create corridors for pollinators



Many of these priority areas identify similar green and blue corridors and linkages, but with some differences. Biodiversity Opportunity Areas form a good basis, but do not include important urban corridors. Natural England habitat network mapping[12] highlights restoration and creation opportunities in the vicinity of priority habitats, but does not include other sites with potential for improvement, especially in urban areas, for example parks, or sites which are only mapped on local datasets.

All sources identify the important corridors – along the Medway and Thames estuaries and marshes of the Hoo Peninsula, the River Medway and the woodlands and other habitats of the Kent Downs. Most sources identify links across the Hoo Peninsula and urban area but the exact location of the corridors varies.

An update of corridor opportunities is shown in Plan 6. These corridors show areas in which biodiversity improvements will help to create landscape scale connections across Medway. This mapping has used information from previous reports[13] as well as current data on nature conservation and greenspace assets. This map should be reviewed and updated as necessary when the Kent Local Nature Recovery Strategy has been completed.

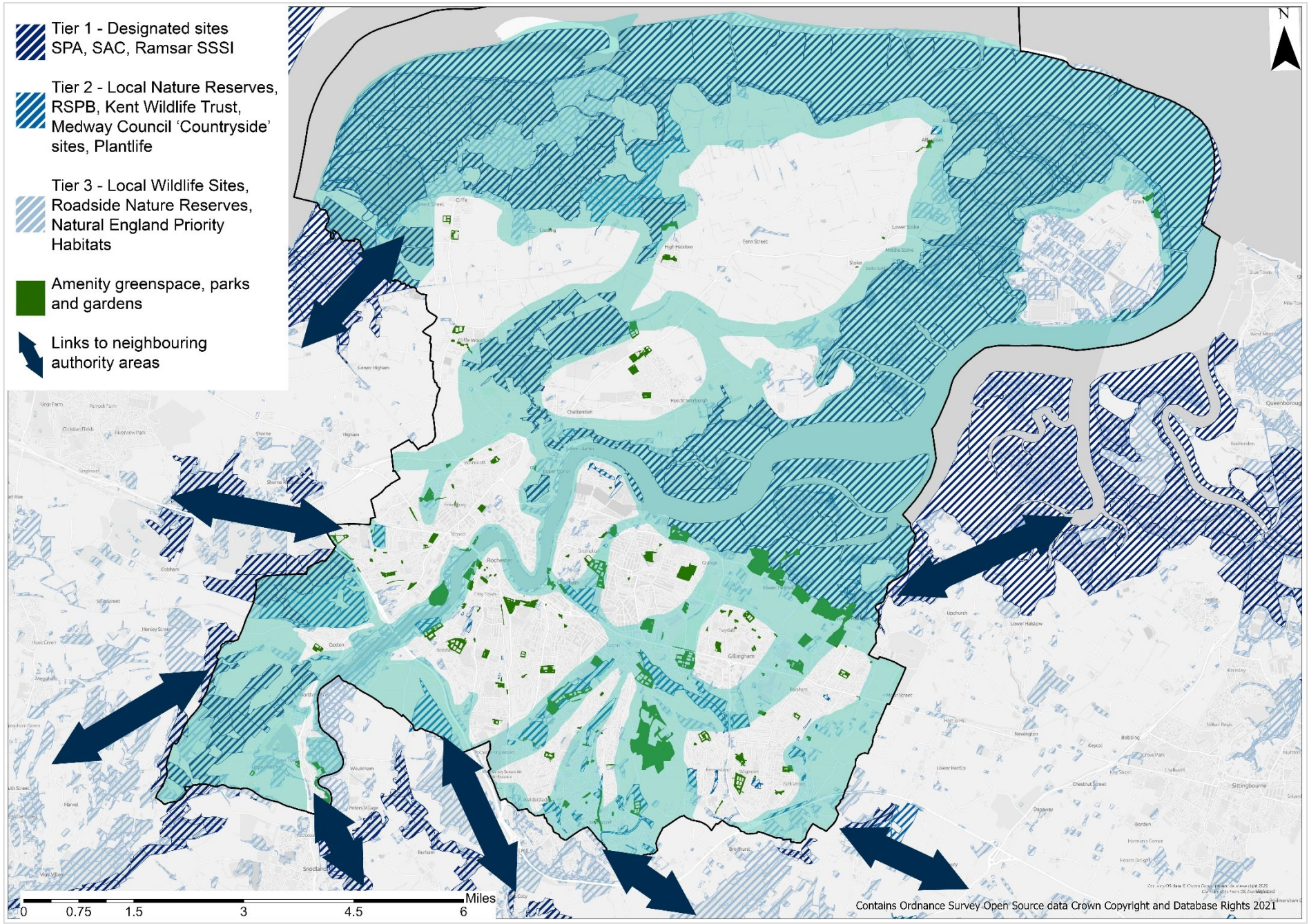
Within these areas priorities should be to:

- Improve the biodiversity value of existing semi-natural sites as the core assets of the corridors, conserving and enhancing the nature within the sites and ensuring they are under appropriate management;
- Buffering and expanding these sites by creating hospitable areas for nature around them;
- Create new sites for nature;
- Creating stepping stone sites within the corridors by making sites better for nature. This could include parks, urban greenspace and gardens.

The mapping of these corridors does not mean that biodiversity improvements are only needed in these areas. In the urban areas especially, there are discrete and important sites which are stepping stone sites for nature.

All development sites should seek biodiversity enhancement on site and ensure permeability for wildlife through the site as well as enhancements for wildlife, including hedgehog corridors and swift boxes. This is particularly important for sites within the corridors. Development must also seek biodiversity net gain in line with national planning legislation and Local Plan policies.

Plan 6: Green and Blue Corridors 2024



Climate Change

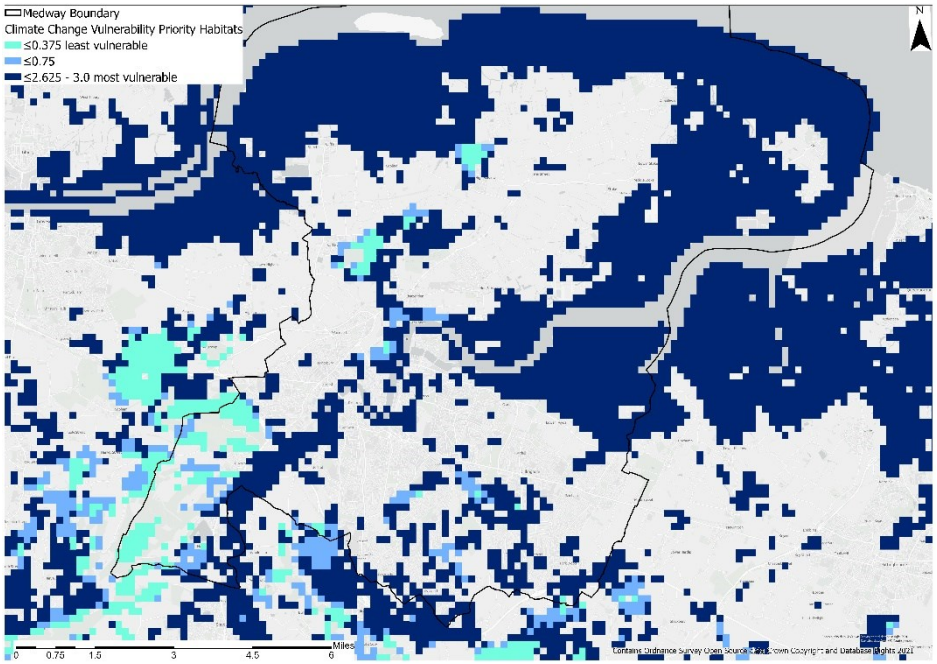
Climate change over coming decades will bring a range of direct and indirect pressures on biodiversity. Many species and habitats are strongly influenced by temperature and rainfall and the interactions between these.

Natural England has developed a climate change vulnerability model to assess the vulnerability of priority habitats. The model uses four measurements which, when combined, provide an overall assessment of vulnerability to climate change.[14]

The overall vulnerability mapping for all priority habitats is shown in Plan 7. As the model only includes priority habitats some important habitat areas which are not in Natural England's dataset are not included. Habitats which have been assessed as being highly sensitive with low adaptive capacity score more highly (3 is the maximum) and those habitats which have low sensitivity and high adaptive capacity are less vulnerable and score lower.

The mapping shows that the estuary habitats, although extensive and not fragmented, are highly vulnerable to climate change impacts. This is due to both sea level rise and the potential of drier summers. The highly fragmented areas of priority habitat, especially grassland sites, in urban Medway are also vulnerable. Whilst the large blocks of woodland around Cuxton and Halling are less vulnerable, the smaller, isolated woodlands across Medway, including the Hoo Peninsula, are more vulnerable.

Plan 7: Climate Change Vulnerability - Priority Habitats



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Drivers of Change, Pressures and Threats

- Climate change impacts (see next page), compounded by other threats to habitats and species as listed below;
- Lack of resources to manage some nature conservation sites sustainably and in the long term;
- Small, fragmented and disconnected sites in some areas particularly in urban Medway;
- Development has been identified as the greatest pressure on Kent habitats, through loss of land and increased population.[15] This pressure can be mitigated through obligations on developers to deliver biodiversity net gain;
- Recreational pressure on urban and rural sites can cause disturbance to wildlife (although partly mitigated by the 'Bird Wise' Strategic Access Management and Mitigation programme);
- Recreational pressure and anti-social behaviour can hinder the implementation of conservation management, e.g. grazing on urban sites, as well as cause direct damage;
- Farming has a significant impact on biodiversity and there is uncertainty around the future of this and future farming and environment payments. 'Farming in Protected Landscapes' within the Kent Downs National Landscape may bring significant benefits to this part of Medway;
- Woodland which is small, fragmented and not managed;
- Pressures and threats arising from current and emerging pests, diseases, and invasive species (including, for example, Oak Processionary Moth, Ash Dieback), on the health of vegetation and safe access to sites;
- Some Sites of Special Scientific Interest are in unfavourable condition;
- A wide range of pollutants, from many sources with the most widespread current harm from excess nutrients (phosphate and compounds of nitrogen) in air and water. There has also been a rise in concern over plastics pollution, particularly in the water environment;
- Lack of information on some species and habitats (although this is being addressed in some areas by the Medway Urban Greenspaces Forum);
- Some Kent Biodiversity Action Plan species under threat and declining.

Motney Hill, Rainham

Needs, Opportunities and Priorities

1. **Protect, enhance and improve the core biodiversity sites and take action for priority species**

    1.1. Protect and enhance the sites which form the core of the biodiversity network – those sites designated for nature conservation and those with known biodiversity value.
    1.2. Ensure that Medway-owned sites with nature conservation value are protected and their value enhanced, bringing declining sites into good condition and reducing sources of harm.
    1.3. Protect, enhance and seek to expand areas of Kent Biodiversity Strategy priority habitats which are notable within Medway - chalk grassland, traditional orchards, coastal and floodplain grazing marsh.
    1.4. Protect and seek to increase populations of Kent Biodiversity Strategy priority species which are notable within Medway – water vole, common blue butterfly, turtle doves, nightingale, shrill carder bee, lapwing and Sandwich tern.
    1.5. Target increases in in tree canopy cover at a ward or area level where there are deficiencies using the Tree Equity Score tool and where tree and woodland establishment will link habitats.
    1.6. Review and undertake mapping of ancient, veteran, and notable trees for Medway, as part of the Ancient Tree Inventory, administered by the Woodland Trust.

2. **Create an ecologically resilient network to join habitats, allow species to move and to help nature adapt to climate change**

    2.1. Reduce sources of harm to existing biodiversity sites.
    2.2. 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.
    2.3. Establish ecological networks through habitat protection, restoration and creation.
    2.4. Integrate climate change adaptation and mitigation measures into conservation management, planning and practice.
    2.5. Work with partners to deliver a resilient network and with neighbouring authorities to develop connections over local authority boundaries.
    2.6. Seek to create mosaics and overall abundance of wildlife alongside the protection of specific habitats and species.
    2.7. Work with the Kent Nature Partnership to develop and deliver a Local Nature Recovery Strategy as part of the National Nature Recovery Network.
    2.8. Ensure there is no net loss of trees, woodland, and hedgerows in Medway and that they are managed to a high standard, healthy and resilient to threats from pests and
    2.9. Continue to increase the number of wildflower verges on council owned land.

3. **Link people and nature**

    3.1. Celebrate and raise awareness of Medway's iconic species and habitats and the need to conserve them.
    3.2. Deliver education and engagement events through Medway's country parks and wider events and cultural programmes.
    3.3. Get people involved in conservation activities and tree planting.
    3.4. Support Friends groups and the Medway Urban Greenspaces Forum to further community engagement and action for nature and greenspace.

3.5. Promote the action of residents to improve wildlife through gardening for wildlife, create hedgehog highways and install swift boxes.
3.6. Incorporate nature into Medway-owned parks and amenity spaces so that people can experience nature close to where they live and create stepping stones for wildlife, for example through permanent wildlife areas such as wildflower meadows.
3.7. Designate more Local Nature Reserves to increase the hectare provision per 1,000 people.
3.8. Improve school grounds, including tree planting, growing spaces and wildflower gardens.

4. Adapt and mitigate for climate change impacts

4.1. Bring forward multi-functional nature-based solutions as cost-effective, climate adapted and biodiversity-supporting alternatives to 'grey' engineering solutions.
4.2. Increase tree and woodland cover, with an emphasis on areas with a Tree Equity Score that is below the required standard and where establishment will enhance habitat connections ensuring that this follows the principles of 'right tree, right place'. Trees should be planted where this fits with the landscape character and should not be planted on sites with other biodiversity interest which would be lost through tree planting. Urban trees should be fitting for the size and location of space.
4.3. Identity habitat areas within Medway for protection as carbon sinks and wildlife habitats. This should include both terrestrial and marine habitats.
4.4. Ensure that tree and woodland planting and establishment follows the principles of 'right tree, right place and for the right reasons'. Planting should complement and strengthen the existing landscape character and not have any adverse impact on other significant biodiversity interest.

5. Ensure development is sustainable

5.1. Seek a minimum of 10% Biodiversity Net Gain, and assess the potential to achieve a higher level through viability and soundness testing in the new Local Plan.
5.2. .Incorporate biodiversity into housing developments, including hedgehog highways, swift boxes and biodiversity-friendly planting in streets and gardens.

Actions for the River Medway and coast are detailed under the 'Blue Infrastructure and the Coast' theme.

Access, Recreation and Active Travel

Introduction

Access to greenspace, the countryside and natural environments is important for health and both physical and mental wellbeing. Access networks can also support active travel through cycling and walking, which also supports health, as well as reducing congestion and pollution. Access to nature can also help people to connect to nature and become more involved and engaged in caring for it.

Accessible Greenspaces

Open spaces not only provide areas for recreation and access, they can enhance the landscape and urban setting, help to mitigate against air pollution and provide nature conservation habitats. Ensuring that open spaces provide a range of these benefits is critical to green infrastructure planning.

There are a wide range of accessible greenspaces in Medway, from the larger country parks of Capstone and Riverside, through to smaller amenity areas, outdoor sports areas and semi-natural spaces. Some of these are owned and managed by Medway Council, but some valuable spaces are managed by other organisations. New housing developments will be expected to provide high quality, accessible greenspace for their new residents. The provision of these spaces in Medway is shown in Plan 8.

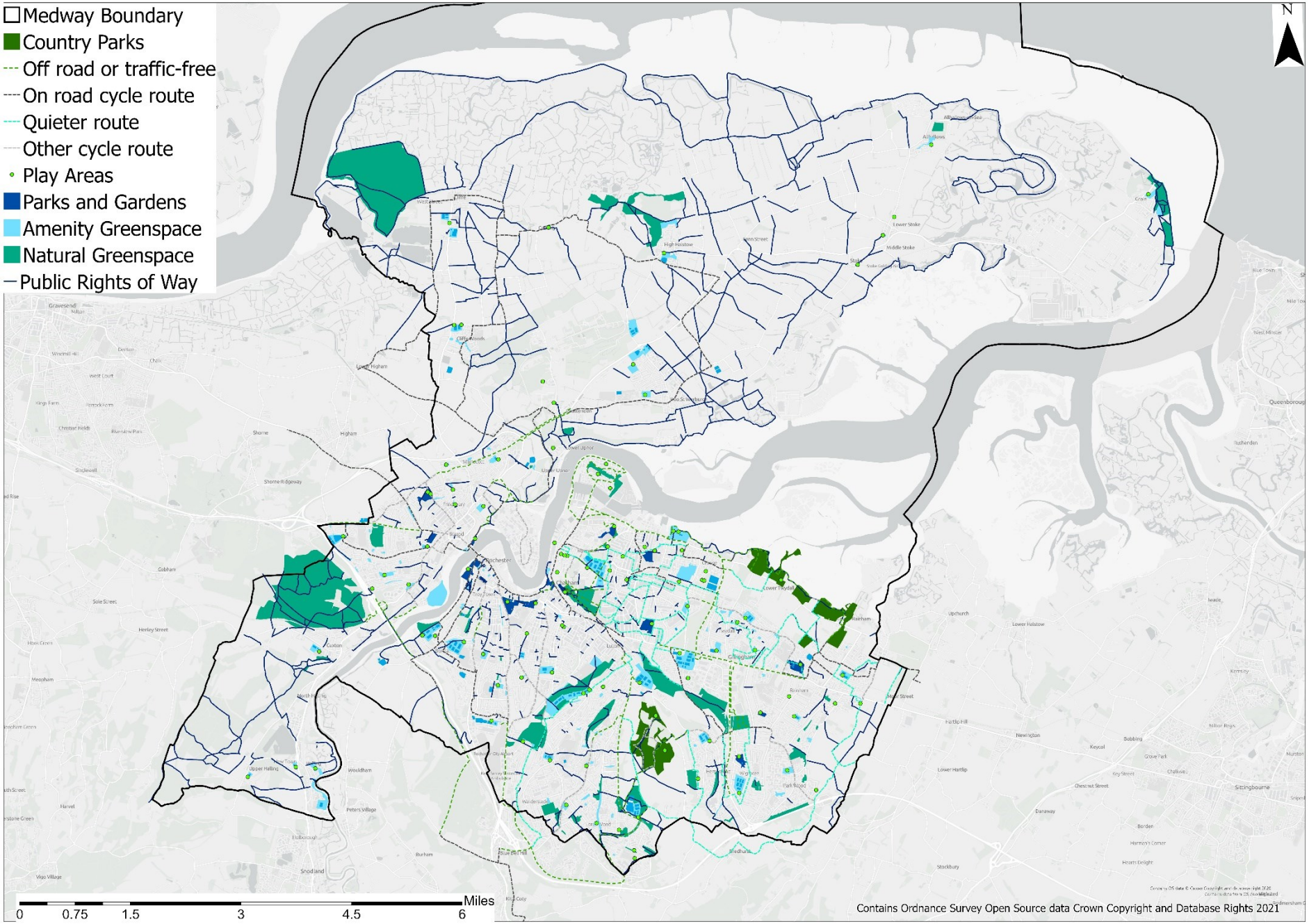
The two largest areas of accessible greenspace, which also contain habitats of biodiversity importance, are Riverside and Capstone Country Parks. An assessment of Medway's open spaces[16] found that these two parks were the most visited in Medway and that people travel from both within Medway and from other areas to visit them. There are a range of facilities on offer, including visitor centres, café and toilets, waymarked trails for a range of users, play areas and accessible paths.

There are other important parks and gardens in Medway and, overall, 84% of local residents make some use of parks.[17] Notable parks include The Great Lines Heritage Park, which forms an extensive area of greenspace in Chatham and Gillingham. The Heritage Park brings together several important heritage features, including Fort Amherst, Chatham Lines, the Field of Fire along with Medway Park Sports Centre. Other larger sites include Jackson's Field, Gillingham Park, Cozenton Park and Broomhill Park. These parks draw visitors from a wider catchment area than would be expected for parks of their size. Other notable parks include The Strand, adjacent to the estuary at Gillingham, and The Vines and other parks in historic Rochester. These, and others, are shown in Plan 9. There are deficiencies in supply of parks across most areas of Medway, most notably in the Strood and rural area. However, since the assessment was carried out more parks have been created[18] and in some areas there is also supply of other types of greenspace.

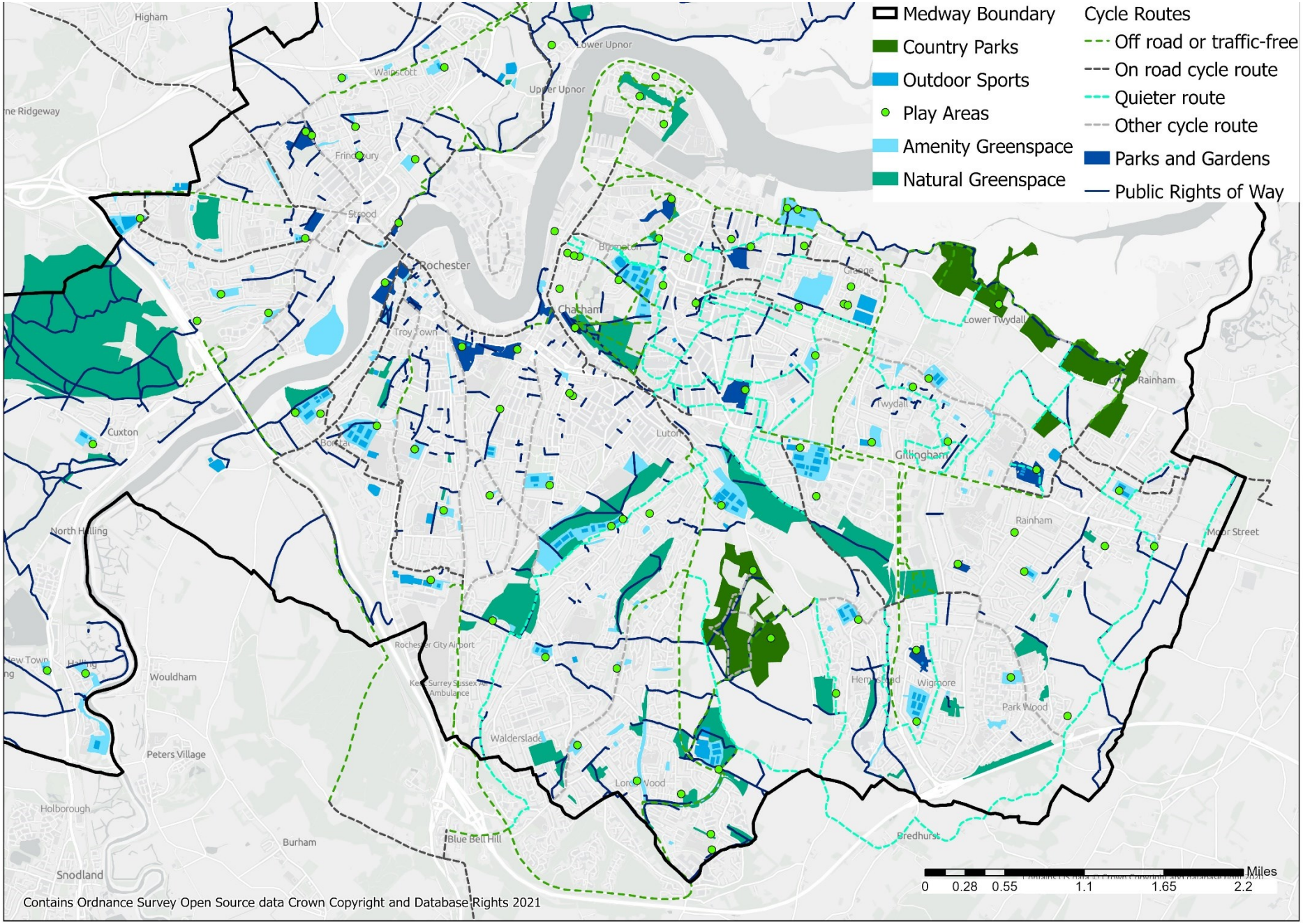
There are many accessible semi-natural open spaces in urban Medway.[19] These include the important and extensive green corridors on the chalk ridges through urban Medway – Daisy and Coney Banks and the Horsted Valley, along with Darland Banks. Other urban semi-natural sites include Rede Common Local Nature Reserve (Strood), Watts Meadow (Rochester), Princes Park (Wayfield), Baty's Marsh (Borstal) and extensive woodlands both in Medway and in neighbouring local authority areas around Walderslade, Lordswood and Hempstead.

Nordic Walking group at Capstone Country Park

Plan 8: Accessible Greenspaces, Public Rights of Way and Cycle Routes



Plan 9: Accessible Greenspace, Public Rights of Way and Cycle Routes - Urban Medway



In the rural areas are also several nature reserves, including Ranscombe Farm Reserve, Northward Hill and Cliffe Pools RSPB reserves, Nashenden Valley and Grain Country Park.

Amenity greenspaces are landscaped areas with no designated specific use, but which provide visual amenity. Amenity greenspaces are varied - they can form part of a wider site, e.g. around sports pitches, can be small, incidental sites or can form larger areas. They offer opportunities for informal recreation such as play or dog walking and are usually close to where people live. They may also offer opportunities for urban wildlife. They form an important part of the green 'fabric' especially in urban areas.

Equipped play areas are also often greenspaces and offer local spaces for young people to exercise. Highest play provision is in Gillingham, Strood and rural areas. The lowest levels of provision are in Rochester and Chatham

However, there is a lack of open space provision for communities in some parts of Medway, particularly in those urban areas which were developed with high-density housing in the 19th and early 20th centuries. Open space provision is low in Gillingham South, Rochester East, Strood North, Rainham Central, Chatham Central, Rainham South, Walderslade and Princes Park. [20]

The Council has commissioned a new Open Space Assessment to support work on the new Local Plan. This is available to view as part of the Regulation 18 consultation in Summer 2024.

Table 2: Provision of Accessible Greenspace - Hectares per 1,000 population[21]

Sub Areas	Parks and Gardens[22]	Amenity	Play	Natural greenspace
Chatham	1.16	0.74	0.03	1.82
Gillingham	0.26	0.73	0.06	1.02
Rainham	2.16	0.21	0.04	0.78
Rochester	0.21	0.68	0.01	1.14
Strood and rural	0.13	1.23	0.05	9.6
Medway Total	0.71	0.78	0.04	3.25
Quantity Standard	0.4	0.74	0.08	1.35

A 2020 Medway Citizens' Panel survey showed that 81% of respondents had visited a park or open space in Medway during the past 12 months. The most frequently activities for those visiting parks or open spaces in the past 12 months were:

- Walking for exercise/pleasure (72%);
- Enjoying the fresh air/good weather (53%);
- Spending time with friends and family (46%);
- Enjoying the peace and quiet (46%).
- Enjoying the natural environment/scenery (45%)

The reasons given for not visiting parks or open spaces in the past 12 months were due to being too busy/ not enough time (38%), poor health (21%), and lack of interest in going to parks or open spaces (21%). Not feeling safe, lack of toilets and lack of information also affect people's willingness to use open spaces.

Cycle Routes

Medway has 81 miles of cycle paths across the five towns (see Plan 8).

Some of these routes are off route and traffic-free which is important to support a wider range of people to cycle. The National Cycle Route 1 passes through Medway, including a traffic free section along the Medway estuary and through Riverside Country Park.

In recent years Medway has invested £2.5 million in cycling. It has created on-road cycle paths that make it easier to cycle safely get to places like Gillingham Business Park, Strood Retail Park, Rainham High Street and St Mary's Island.[23] There are also schemes prepared to improve existing shared cycle and pedestrian footways in the district.

Medway Council works closely with Sustrans to identify and develop improvements to Medway's cycle network and also works with Sustrans' volunteer rangers to act on reported issues. Medway also promotes Living Street's International Walk to School Month (October) and Sustrans Bike to School week.

Fingerpost on public right of way 'Bessies Lane' Hoo Peninsula

Public Rights of Way

Public rights of way are a free and accessible resource. There are public rights of way across the whole of Medway in both the countryside and rural areas (see Plan 8).

There are approximately 186 miles of public rights of way in Medway. There are four types – footpaths, bridleways, restricted byways and byways. All of these can be used by pedestrians. Cyclists and equestrians can use bridleways, restricted byways and byways, and these can form useful links in the active travel network (see later).

There is a section of the North Downs Way National Trail within Medway. The King Charles III England Coastal Path from Grain to Woolwich opened in 2021 and has the status of a, with this section forming part of the Thames Path National Trail linking the 'source to sea' Thames route. The 160 mile Saxon Shore Way trail, which follows the former Roman coastline through Kent to East Sussex, enters Medway near Cliffe, then passes across the Hoo Peninsula, before following the Medway estuary to Rochester and through Riverside Country Park. Medway Council has also produced shorter promoted routes.

The council is finalising the Medway Local Cycling and Walking Infrastructure Plan for approval in 2024.

Medway's Rights of Way Improvement Plan (ROWIP)[24] recognises the importance of public rights of way for many people, including those with mobility impairments and health needs. The ROWIP sets out the priorities for improving rights of way to meet the needs of the public, now and in the future.

The main priorities of the ROWIP are to support health and wellbeing, improve accessibility, increase active travel and improve information:

- Protect the network and maintain it in the best condition possible, prioritising safety and areas of greatest need. This includes maintaining the network, clearing obstructive or dangerous vegetation and keeping structures in good condition. Priority paths are those in and near urban areas, well-used paths and those linking town and countryside;
- Ensure that the network evolves to meet current and future needs and that connectivity for all users is improved;
- Ensure that access improvements are strategically planned to meet Medway's needs including larger-scale strategic projects where necessary;
- Ensure that housing growth is positive and has no detrimental effect on public rights of way, and that improvements to public rights of way are secured through new development, including new multi-user, high quality routes and that urban and countryside areas are linked;
- Create and improve the connections of 'higher status'[25] routes for equestrians and cyclists;
- Provide new promotional resources which support residents in accessing their public rights of way, the visitor economy, people with disabilities or other under-represented users. Routes to be promoted in in urban and rural areas to support a wide range of users
- Support more people with disabilities and under-represented groups in accessing public rights of way. Improve understanding barriers and work with partners to carry out physical and promotional improvements;
- Support improved health and wellbeing through improving accessibility and working with health walks and public health partners.

Drivers of Change, Pressures and Threats

- There is a supply of accessible greenspace across urban Medway, although some areas lacking particular types of space;
- There is less greenspace in the densely populated areas of Gillingham South, Rochester East, Strood North, Rainham Central, Chatham Central, Rainham South, Walderslade and Princes Park;
- Due to the large urban population, many sites have high use. Some sites attract visitors from further afield than would be expected for a site of their size, indicating a high demand. This research was carried out before the Covid-19 pandemic, during which demand and use of greenspaces increased greatly;
- Pressures on greenspace will increase due to the increase in population. It is important that adequate greenspace, active travel links and upgrades to public rights of way area provided and that these are maintained to a high standard;
- Safety is an important consideration for users and some urban sites suffer from anti-social behaviour issues. Overgrown areas, poor sight lines, vandalism and litter can increase perceptions of lack of safety;
- There remains pressure on resources for greenspace and public rights of way maintenance due to ongoing strain on local government resources. Lack of maintenance, alongside obvious vandalism and neglect have been shown to deter people from using open spaces;
- The two country parks, Capstone and Riverside, attract high numbers of visitors from Medway and beyond. However, most people need to drive to these sites and they do not fulfil the need for local greenspace for most people;

- There is a good supply of cycle routes, but most of these are shared with traffic. Greenways and traffic-free routes are important to encourage less-experienced cyclists.

Needs, Opportunities and Priorities

1. **Ensure that greenspace provision keeps pace with population growth and provides for Medway's future residents**

    1.1. Ensure that greenspace provision meets the standards set out in Medway's Local Plan and that development delivers high quality greenspace provision to meet the needs of new residents (no net loss).
    1.2. Manage greenspaces to ensure that they can accommodate high levels of visits, providing infrastructure and maintenance to meet high demand.
    1.3. Seek new greenspace in areas where there is a deficit.
    1.4. Where development is taking place, ensure that public rights of way are improved and, where possible, provide multi-user routes and new connections.
    1.5. Invest in public rights of way, particularly those linking town and countryside, to ensure they are accessible to a wide range of people.
    1.6. Plan strategically to ensure accessible greenspace, cycle routes, walkable spaces and public rights of way are connected, especially in areas of development, so that opportunities are not lost and gains are delivered.

2. **Support increased active travel, to relieve congestion and air pollution and encourage healthy living through a strategic cycle network and walking routes.**

    2.1. Make civic spaces more accessible and welcoming using green infrastructure to encourage people to walk and cycle.
    2.2. Integrate green infrastructure into new masterplanning in ways that promote active travel, recreation and leisure, and support community and social engagement.
    2.3. Ensure urban public rights of way are more fully utilised, keeping them clear from flytipping, signing them and upgrading for cycling use where possible.
    2.4. Implement more cycling routes.
    2.5. Develop urban promoted walking trails.
    2.6. Seek greenways and traffic-free routes where possible.

3. **Prioritise improving access to greenspace and creating greener communities in areas of deprivation or where there is poor or unequal access.**

    3.1. Ensure improvements are carefully planned with local consultation to provide equitable and sustainable benefits and to understand the actual and potential local benefits of greenspace.
    3.2. Ensure greenspace includes thoughtful and inclusive physical design, to deliver multiple outcomes to attract different population groups.

Health and Wellbeing

Introduction

Poor health not only has a negative impact on individuals, it also incurs a cost to society. This is through both the direct costs of health care and in reduced economic outputs due to, for example, lower employee productivity, higher absence rates and early mortality.

Being physically active is strongly linked to better health and wellbeing. There is an established causal link between physical activity and many chronic health conditions, including coronary heart disease, stroke, cancer, type 2 diabetes and mental health problems. Walking in particular has been described as "*the nearest activity to perfect exercise*",[26] being the easiest, most accessible and cost effective way for most people to increase their physical activity.

Access to and physical activity in the natural environment also has a greater impact on mental health, with exercise in all types of green environment bringing improvements in self-esteem, positive mood and anxiety levels.

Some recent valuations have estimated that:

- £2.1 billion in annual health costs could be if everyone in England had good access to greenspace, due to increased physical activity in those spaces;
- In Birmingham, the annual benefit of their parks and greenspace is nearly £600 million, including £192 million in health benefits;
- In Sheffield, every £1 spent on maintaining parks brings £34 in health cost savings.[27]

The Marmot Review[28] states that the fair distribution of health, wellbeing and sustainability are important social goals. These are influenced by a wide range of factors, one of which is the environment. The review recognises the importance of good quality greenspace in tackling health inequality. However, the availability and quality of access to greenspace is not evenly distributed, with those in deprived urban areas often having less access. In addition, health and wellbeing have historically been poorly integrated with spatial planning.[29] This leads to the creation of places which do not support people in improving their health through regular activity, or places which contribute to poor health through high levels of road pollution.

Medway's Health and Wellbeing

Medway's Joint Health and Wellbeing Strategy[30] aims to "ensure everyone in Medway lives a long, healthy, and happy life"" through making Medway a place where help is easily available, places are connected and where people have a seamless journey between services.

Key priorities from this strategy of relevance to this strategy are:

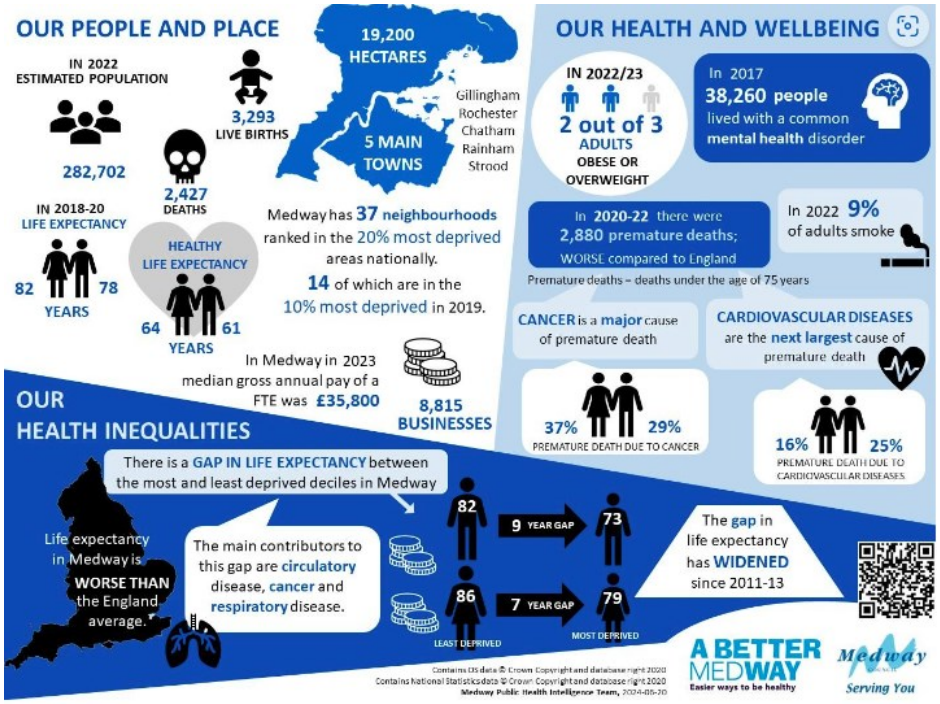
- Healthier and longer lives for everyone: people in Medway are supported to live healthy, long and happy lives, and value self-care.
- Safe, connected and sustainable places: People and organisations work together to create a sustainable, clean and a green environment; green spaces can be accessed and used by all; and people feel safe in their neighbourhood.

The infographics on the right summarise Medway's health and wellbeing statistics and inequalities.[31]

Health and Wellbeing in Medway

- 19.9% of children live in low income families;
- Life expectancy for both men and women is lower than the England average;
- Life expectancy at birth for men and women and under 75 mortality rate for cancer and circulatory diseases is significantly worse in Medway than the England average;
- Life expectancy is 9.1 years lower for men and 6.7 years lower for women in the most deprived areas of Medway than in the least deprived areas;
- In Year 6, 23.1% of children are classified as obese;
- Medway is in the lowest quartile in England for healthy eating with 28.5% of adults (16+ years) meeting the '5-a-day' fruit and vegetable consumption recommendations, significantly worse than the England average of 31%;
- Medway has significantly higher rates of obesity than the England average, 30.2% of adults in Medway are obese compared with the England average of 26.2%;
- Average life expectancy in rural areas is significantly greater than in urban wards. Life expectancy for men is highest in Cuxton and Halling at 83.5 years, and lowest in Chatham Central at 73.4 years.[32]

Health and disability deprivation is shown in Plan 10. Levels of access to open space vary considerably across Medway. There are several areas of poor health where there is also low greenspace. Whilst many are clustered in urban areas, there are significant areas of poor health in rural areas where there is low access to multifunctional greenspace. Here, public rights of way perform an additional important function.



Air Quality in Medway

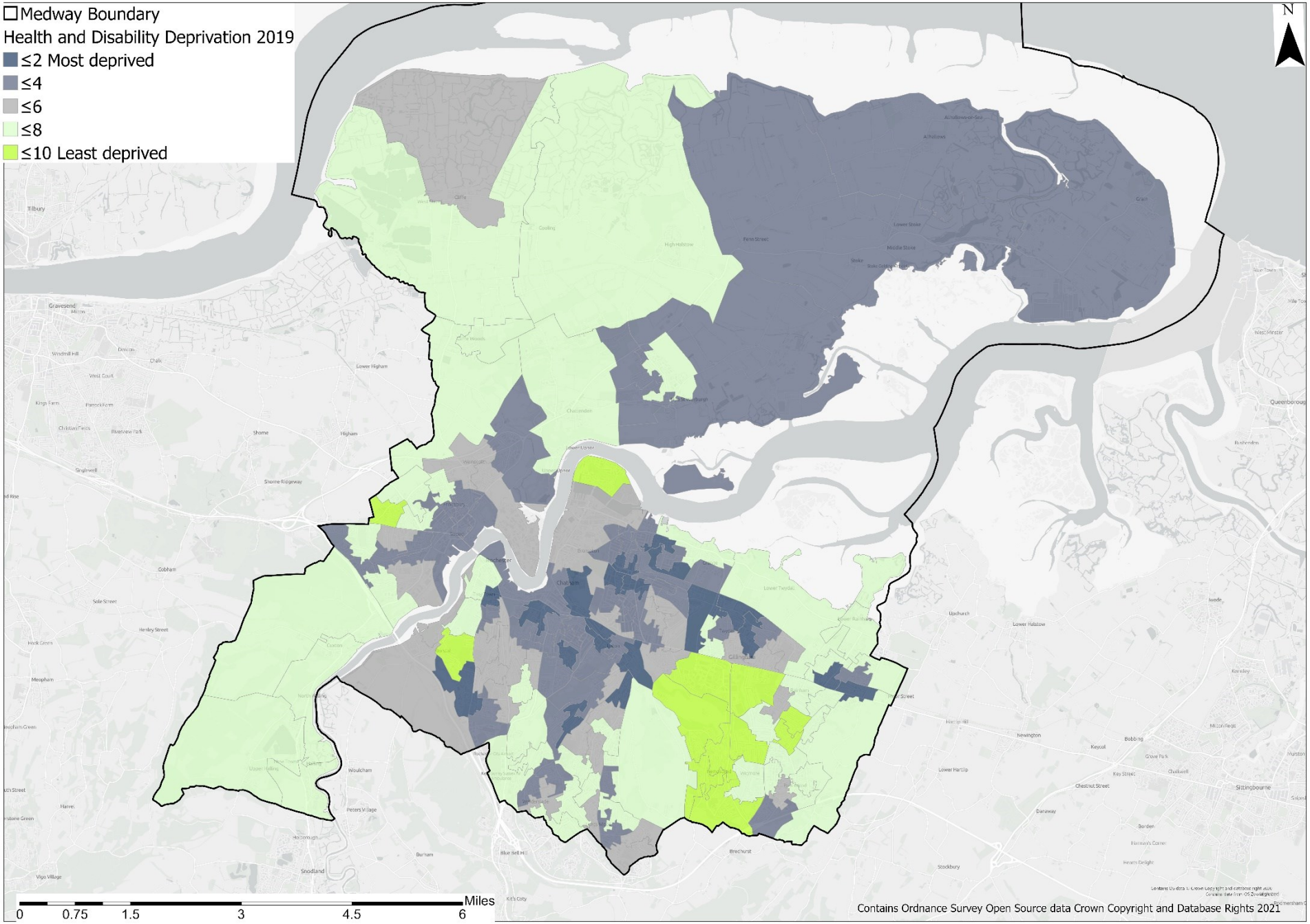
The impact of air quality upon health is unquestionable. Long and short term exposure to poor air quality can have health impacts ranging from premature death due to cardiovascular disease and lung cancer, aggravation of asthma and other allergic illnesses, and reduced quality of life.[33] It is estimated that one in every 18 deaths in Medway in 2021 were linked to particle air pollution

The Kent and Medway Air Quality Partnership provides strategic direction across the county and has a health subgroup which provides advice on the health implications of air pollution. Medway Council's Air Quality Action Plan 2015, describes the air quality assessment process in Medway, identifies the role of traffic in the current problem and sets out a range of transport-focussed measures to improve air quality.

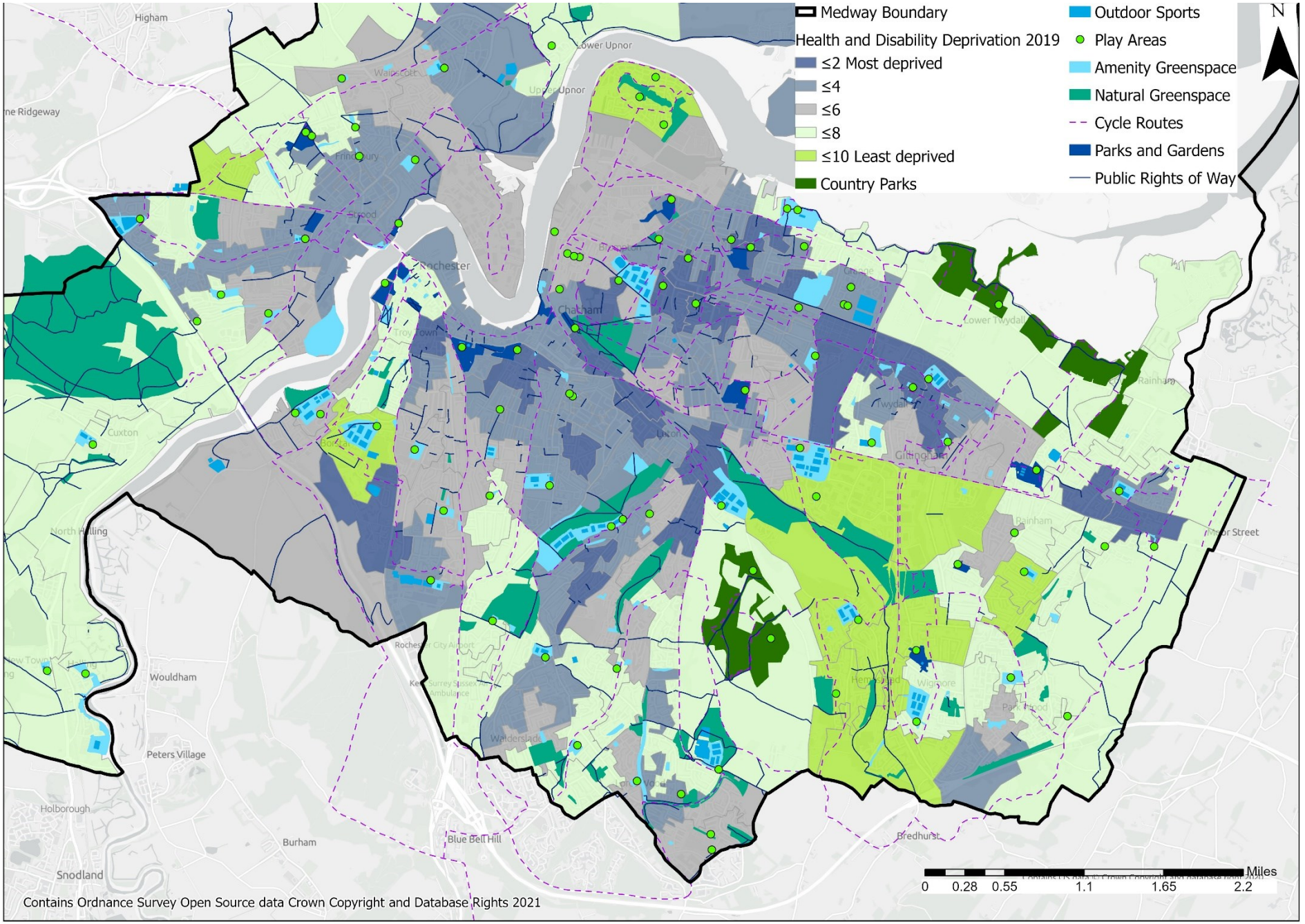
The Action Plan and updates recommend improving air quality at the Central Medway, Pier Road, Gillingham and High Street, Rainham and Four Elms Air Quality Management Areas to work towards meeting the national air quality objective for the protection of human health.

Carefully positioned green infrastructure that incorporates the right type of vegetation, separates people from pollution by introducing barriers and extends the distance between the pollution source and individuals. Where possible road and pavement layouts, should incorporate urban greening schemes, and providing active travel routes through greenspace all help reduce exposure to air pollution and improve health.

Plan 10: Health and Disability Deprivation (2019)



Plan 11: Health and Disability Deprivation and Access - Urban Medway



Green Infrastructure to Support Health and Wellbeing

Active Travel and Healthy Lifestyles

Active travel allows people to be physically active as part of their daily lives, bringing health and wellbeing benefits as well as saving money and reducing the need to find additional time for exercise. It helps both the environment and health through reducing air pollution and outputs of climate change gases. It can not only help reduce congestion, in urban areas it may also provide a quicker journey than by motor vehicle. Investment in active travel also makes economic sense, with a high benefit to cost ratio for many schemes.

People could get most of the exercise they need by walking or cycling short, everyday journeys. Feedback from Kent residents and organisations shows that the main reasons for not using active travel to make these short journeys are a perceived lack of suitable continuous routes between homes and community services, workplaces or schools, and not enough promotion of existing routes. Other issues include a lack of facilities, such as lockers and secure bicycle parking, obstacles in cycle lanes and footways, and concerns over safety.[34]

However, a well-designed, accessible environment can encourage people to walk or cycle, and people cycle more when there is cycle infrastructure and separation from traffic. Therefore, making it easier for people to walk, cycle, scoot or wheel their way to their destination is not only the greenest option, but one that brings significant physical and mental health benefits. Streets are also more welcoming for all users with seating areas, plants, cycle parking or other community facilities.

Health Walks: Medway runs an extensive volunteer led Health Walks programme, including Nordic Walking groups. Each walk is graded for ability on our website which also includes several Self-Guided Routes across Medway..[35]

Cycling and Medway Cycle Group: Medway's Active Travel Co-ordinator has developed several cycling projects including volunteer led cycling groups and the "on yer bike" programme for adults to learn to cycle.[36]

Access to Greenspace

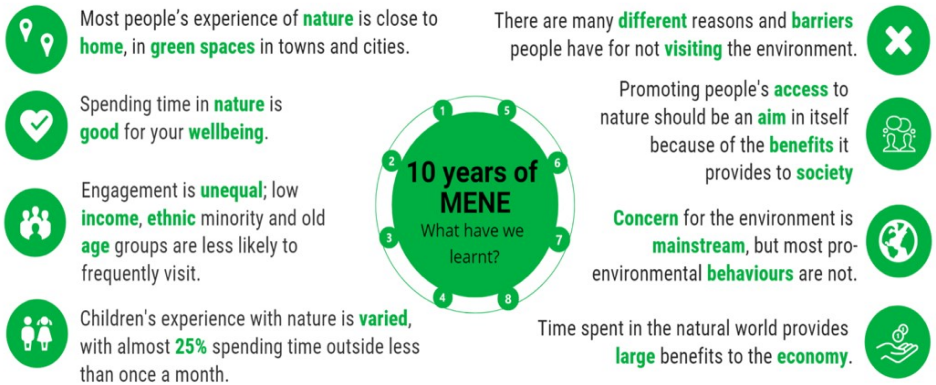
From 2009 to 2019, Natural England ran the Monitor of Engagement of the Natural Environment (MENE) survey. It collected data about outdoor recreation, pro-environmental behaviours and attitudes towards and engagement with the natural environment.[37] Good access to greenspace have enormous benefits to health and wellbeing as well as many other benefits.

Some areas in Medway are deficient in green space and linkages to greenspace (Gillingham South, Rochester East, Strood North, Rainham Central, Chatham Central, Rainham South, Walderslade and Princes Park). However, it is also apparent that some communities with poor health outcomes have very good access to greenspace. There may be a need to drill deeper into local circumstances in these areas.

A recent Public Health England report recommends local research to:

> *"Develop persuasive, evidence-informed case studies that highlight the impact that accessible greenspace has on local health outcomes", and to "Support meaningful engagement across local government functions and the community to understand the actual and potential local benefits of greenspace and reveal the complex and diverse ways greenspace is thought about and used."*[38]

People living with disabilities also have access needs. This can be physical improvements, such as additional seating or handrails, or more information on how accessible places are. Disability will affect many people during their lifetime. Only 17% of disabled people were born with their impairment. The majority of disabled people acquire their disability later in life, with 44% of pension age adults being disabled.[39] It is important that open spaces and public rights of way are made as



accessible as possible to that people can benefit from the health and wellbeing gains from being outdoors, throughout their lives and no matter what form of disability they may be living with.

Allotments and Community Growing Spaces

Allotments not only provide green havens, often in urban areas, they provide important greenspaces for accessing nature and healthy exercise. Out of 38 allotments in Medway, 28 are owned and managed by Medway Council, 9 owned and managed by Parish Councils and one owned by a trust. Overall provision is 14.26 plots per 1,000 households, which is below the recommended 20 plot per 1,000 household standard[40] (but higher than many neighbouring authorities). Provision of plots is highest in Gillingham and lowest in Chatham and Rainham.

Other types of community growing space provide greenspace and a place to bring communities together. There is a growing interest in community orchards. The Kent Biodiversity Strategy has the target to increase traditional orchards by 67 hectares across Kent.

Drivers of Change, Pressures and Threats

- Some areas of poor health also have low levels of greenspace;
- There is a good supply of greenspace across Medway but not all of this space is accessible. Access to some spaces is limited due to terrain, perceptions of safety and lack of infrastructure.
- Medway, in line with the rest of England, has an ageing population. This will mean more people have health needs, mobility issues and will be living with disability;
- The number of people aged 65 and over will increase by 48% by 2035. Active lifestyles and healthy eating must be reinforced by ensuring that there are good quality opportunities in the natural environment which can be carried through to old age.
- Medway has significantly higher rates of obesity than the England average, 30.2% of adults in Medway are obese compared with the England average of 26.2%.
- Medway is in the lowest quartile in England for healthy eating with 28.5% of adults (16+ years) meeting the '5-a-day' fruit and vegetable consumption recommendations, significantly worse than the England average of 31%.
- Average life expectancy in rural areas is significantly greater than in urban wards. Life expectancy for men is highest in Cuxton and Halling at 83.5 years, and lowest in Chatham Central at 73.4 years
- Evidence shows that spending time in nature is also good for mental wellbeing. Medway has a range of good quality green spaces, such as Capstone and Riverside Country Parks, Great Lines Heritage Park, These should be invested in for the future.
- Investing in Green and Blue Infrastructure will ensure that the health and wellbeing challenges faced in Medway can be better supported, especially if they are informed by local health data, the Joint Strategic Needs Assessment and the Joint Health and Wellbeing Strategy.

'Jump' at Hilly Fields

Needs, Opportunities and Priorities

1. **Providing access to green infrastructure close to home and which is inclusive for all.**

    1.1. Plan strategically for a reduced car Medway – planning strategically to link public rights of way, cycle routes and greenspaces.
    1.2. Ensure that greenspace is provided by new development so that everyone has access to greenspace close to home. Development should follow the 3-30-300 rule for creating healthier and greener neighbourhoods. This promotes having at least 3 well-established trees in view from every home, school, and place of work; no less than a 30% tree canopy in every neighbourhood; and no more than 300 metres to the nearest public green space from every residence.
    1.3. Maximise access to the riverside, with improved access to and along this route, as this has the potential to provide a level and attractive linear route for all abilities.
    1.4. Use green infrastructure in civic spaces and urban streets to make these places more attractive for walking and cycling, improving health and reducing car travel.
    1.5. Make routes and spaces as accessible as possible.
    1.6. Link town with countryside through improved routes and public rights of way.
    1.7. Time spent in ‘blue space’ – near water – has also been found to improve mental and physical health. Blue space is abundant in Medway and includes the sea, coastlines, rivers, lakes, and canals. Improve access to these resources.
    1.8. Embed green and blue infrastructure into regeneration plans and cultural programmes and strategies.

2. **Support people in taking healthy exercise.**

    2.1. Update and revise promoted routes using public rights of way in both urban and rural areas, providing more information on accessibility.
    2.2. Improve routes which are used by Medway Health Walks.
    2.3. Continue to support Medway Health Walks and the Medway Cycling Projects.
    2.4. Work with partners to understand better the specific needs of those with mobility or other disabilities.
    2.5. Create more spaces to support community growing – allotment facilities, gardens, edible trails and green walls and educate and support residents in utilising these.

3. **Initiate local evidence-informed research to understand the impact that accessible greenspace has on local health outcomes, especially for disadvantaged groups.**

    3.1. Support meaningful engagement to understand why some communities do not use greenspace, even when it is relatively close, to reveal the complex and diverse ways greenspace is thought about and used.
    3.2. Monitor and evaluate local changes in access to greenspace, in conjunction with health data over time, to understanding of what works, for whom and how.
    Establish interventions, such as green social prescribing initiatives, that will support people who do not use greenspace to begin using it.

Blue Infrastructure and the Coast

Introduction

Blue infrastructure in its many forms is an important feature of Medway district. Water has determined the location of the Medway towns, with water the driving force for the location of settlements and industry. Water has shaped, and continues to shape, the heritage and character of the landscape. The wild and open landscape, with its extensive marshes, ditches, fleets and reedbeds are an iconic landscape of the Hoo Peninsula. This area is outstanding for its biodiversity, as outlined previously. Marshes and ditches (already mentioned in biodiversity).

Water makes Medway district particularly outstanding for biodiversity. Over half (55%) of Kent's river and stream habitats and 13% of its standing water are found in Medway and Kent's largest Biodiversity Action Plan saline lagoon habitat is at Cliffe on the Hoo Peninsula.[41]

Some of Medway's notable blue infrastructure features are considered in this section. An overview of Medway's blue infrastructure, plus areas at risk from flooding, is shown in Plan 12.

The River Medway

The River Medway is the most prominent blue infrastructure feature of Medway. The river rises in Sussex, passing through Tonbridge and Maidstone before finishing its journey to the Thames in Medway district. All of the river through Medway is tidal.[42] The river has immense biodiversity and historical importance. It has been an artery for trade, with commerce using the river for transport as well as using the river for power for many hundreds of years.

View across the Medway estuary

At the southern extent, where the river enters Medway district to the south of Halling, the river winds through a broad valley carved through the North Downs.[43] The river gradually widens through Rochester until Upnor, where the Medway expands to a wide estuary. In these reaches are saltmarshes and mudflats, interspersed with many islands. This area is particularly rich in wildlife, and also important for its heritage features. Features and priorities for the river are explored in further detail in the River Medway Priority Area (page 95).

Pools and Lakes from Medway's Industrial Heritage

The legacy of quarrying and digging for minerals has left a legacy of pools and lakes. Chalk was quarried in many places to support the cement industry of the 19th and early 20th centuries which was booming along most of the Medway estuary. On the Hoo Peninsula, clay was excavated to support the cement industry. Cliffe Pools is a series of fresh pools and saline lagoons formed from former clay diggings and depositions of river dredgings. Since 2001 the area has been owned by the RSPB and is now a reserve with public access. The site is renowned for wading birds, with large flocks moving in from the Thames estuary at high tide. It also supports many passage birds as well as breeding avocets, redshanks, lapwings and ringed plover.

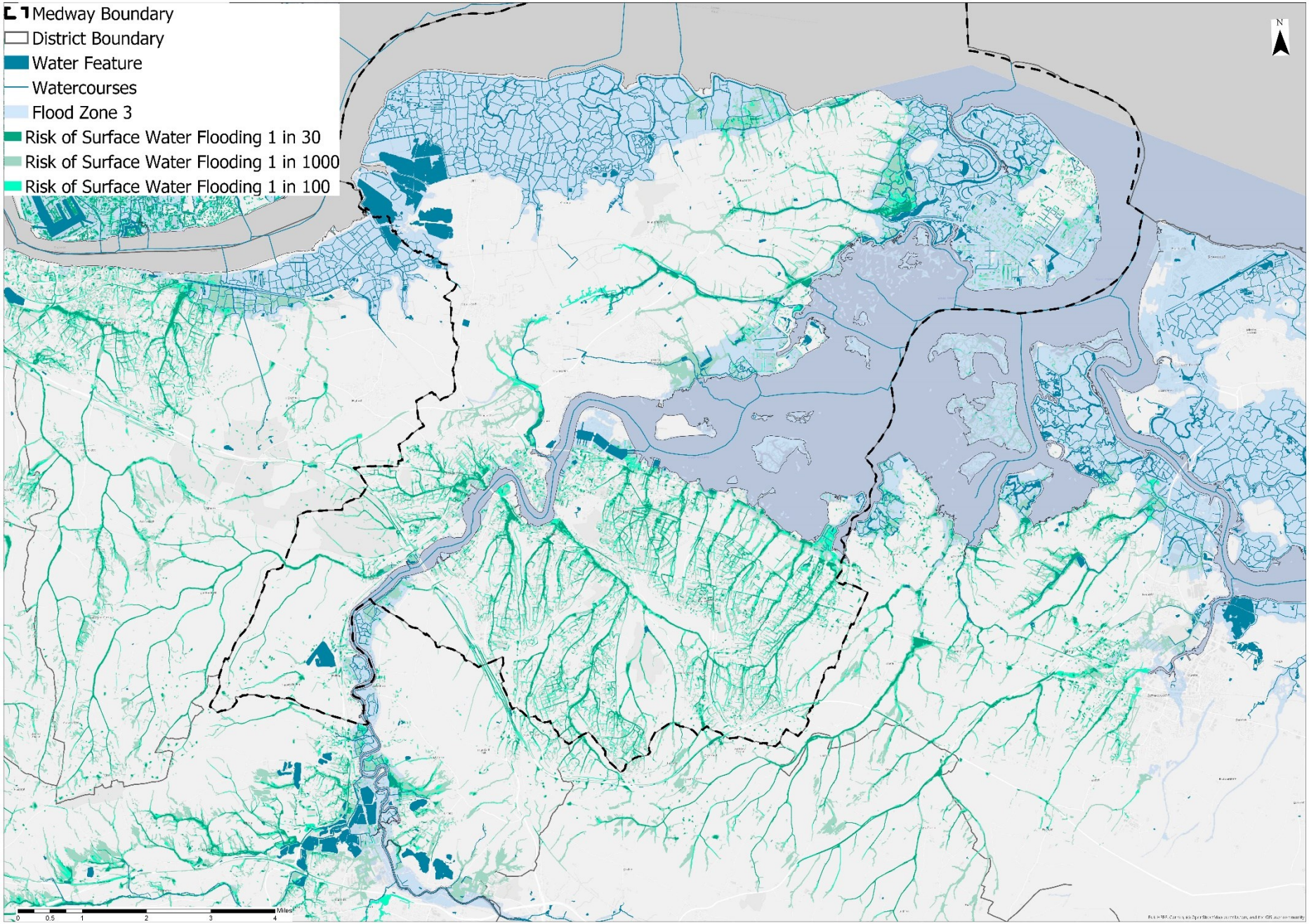
Cliffe Pools, Cliffe, Hoo Peninsula

St Andrew's Lake (also known as the 'blue lake') near Halling is also a well-known feature. The lake has developed in a former chalk quarry and has crystal clear bright blue water due to the suspension of tiny chalk particles in the water.

At St Mary's Island, to the north of Chatham, are three dockyard basins. There is a long a rich heritage in this area, with the island having been used for many purposes, including defence and housing prisoners. The basins were created in the late 1800's by driving piles into the marsh. Since the area was redeveloped the basins are used for watersports and as a marina.

St Andrew's Lake (the 'Blue Lake') near Halling

Plan 12: Water Resources and Flooding



The Coast

Medway has an extensive coastline. Along the northern edge of the Hoo Peninsula the coast is the outer part of the tidal Thames Estuary. The shoreline is protected through sea defences and walls, with grazing marsh on the low-lying land beyond. At the eastern extent of the Hoo Peninsula, at the Isle of Grain, the coastline becomes the Medway Estuary. The outer estuary is broad, with many islands, becoming narrower through the Medway towns and inland.

In some areas natural areas of beaches, saltmarshes and mudflats remain. Maintaining the current defence lines within the estuary will result in increased instances of 'coastal squeeze' – the reduction in area of these important habitats as sea levels rise. With high rates of sea level rise and low rates of sediment supply intertidal saltmarsh and mudflat habitats may suffer erosion where defences or high land constrain the landward movement of the shoreline.

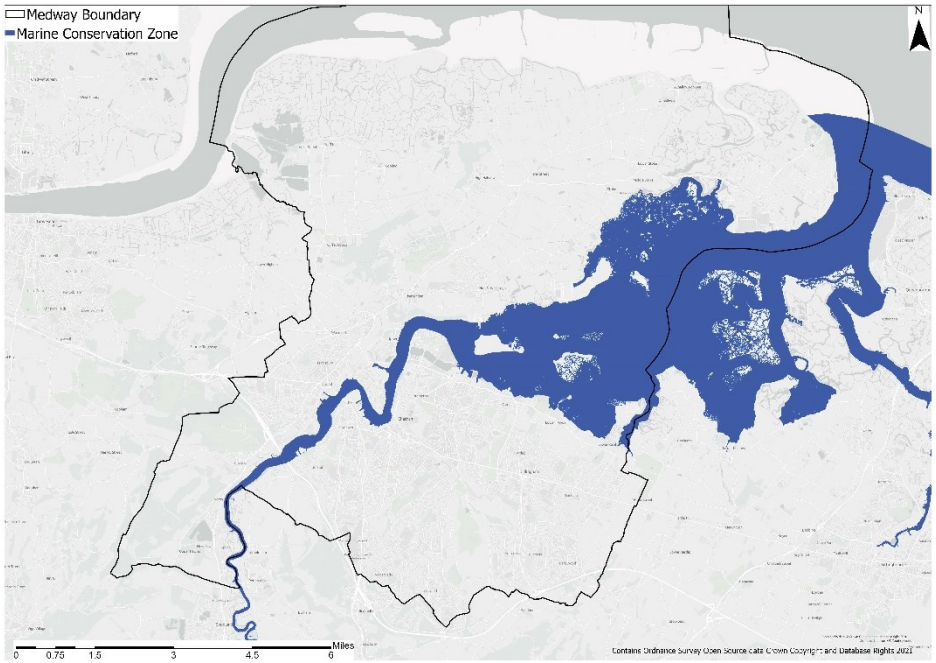
The management of Medway's coastline is covered in two Shoreline Management Plans – for the Medway Estuary[44] and for the Isle of Grain[45] alongside the Medway and Swale Strategy Study. In some areas the policy is to maintain flood defences to protect important structures and infrastructure. In other places the policy is to allow managed retreat.

Beach near St Mary Hoo

Medway Estuary Marine Conservation Zone

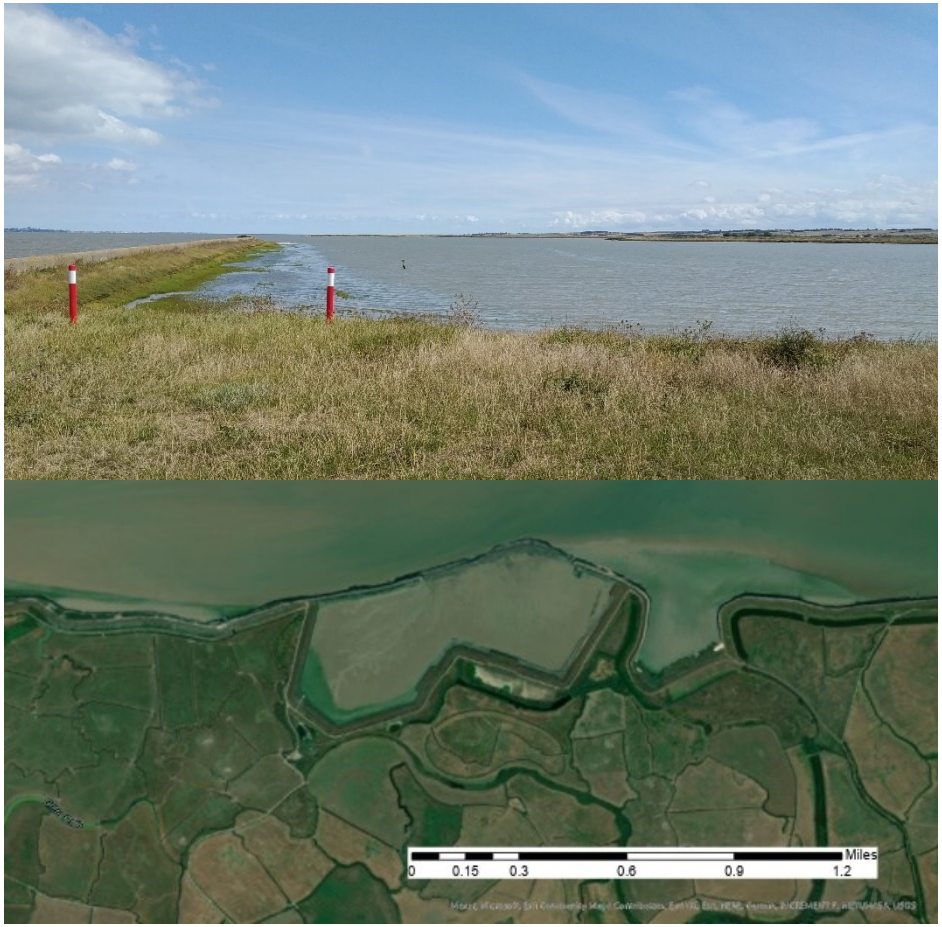
The inshore Medway Estuary Marine Conservation Zone (MCZ) covers the single tidal system with the Swale to the east and includes everything to mean high water. Within the MCZ there is a complex and dynamic ecosystem. The mix of fresh and sea waters, combined with the tidal movement, create changing levels of salinity and nutrients providing a fertile environment for wildlife, particularly invertebrates, fish and birds. It is surrounded by low lying intertidal areas of saltmarsh and mudflat, which are conserved under other designations. The site has been designated due to the presence of the tentacled lagoon-worm and estuarine rocky habitats and intertidal rock features which are rare within the South East.[46]

Plan 13: Medway Estuary Marine Conservation Zone



Salt Fleet Flats Reserve

Salt Fleet Flats on the north coast of the Hoo Peninsula is an area of managed retreat. Around 700 m of the sea wall was breached and an inland wall of 2.4 km constructed to create new habitat as compensation for the London Gateway Port development. Around 65 hectares of habitat were created for wildlife, comprising mudflats and saltmarsh.



Salt Fleet Flats Reserve

Water Resources

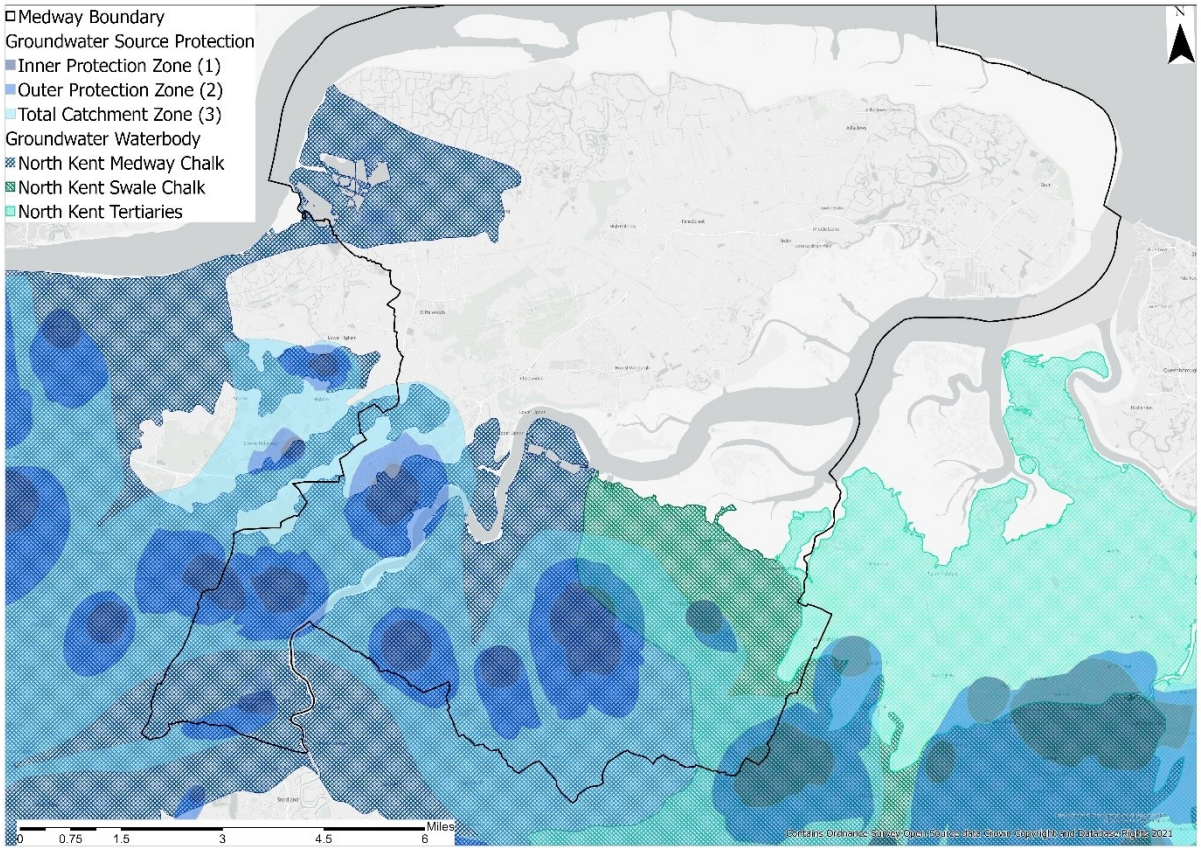
Surface and groundwater water quality is vitally important for water supply, general amenity, recreation, fisheries and nature conservation supporting domestic, industrial and agricultural uses. In Medway there are several groundwater sources that are predominantly in the urban area and Medway Valley.[47] These are highlighted via the Environment Agency Groundwater Source Protection Zones that aim to protect the water quality of groundwater sources (Plan 14).

Lying under Medway is the principal chalk aquifer of the North Downs.[48] Groundwater source protection extend across the aquifer to protect sources of water. These zones help to protect the precious aquifer from pollution, such as petrol or soakaways from septic tanks.

Drinking water is supplied by a mixture of groundwater and rivers. Use of water has an impact on aquatic ecosystems. There is a need to protect water source and limit water use.

Medway is an area of serious water stress as identified by the Environment Agency. Southern Water and Southeast Water are the statutory water suppliers in Medway.[49] There is a shared interest in the protection of groundwater supplies and water quality. Medway will have a supply and demand deficit of between 25 and 35 million litres of water a day - if no action is taken before the population grows and as the climate changes.[50]

Plan 14: Groundwater Waterbodies and Groundwater Source Protection Zones



Flood and Water Management

The Medway Towns are at risk of flooding from a number of sources, including tidal and surface water flooding, as well as flooding from groundwater, streams and ditches. A national assessment of surface water flood risk indicates that Medway is one of 116 communities throughout England which is considered to be at significant risk of surface water flooding.[51] Currently, tidal flood risk infrastructure provides a varying level of protection to the areas of ecological importance across the low-lying land in the north of Medway, and the strategically important towns situated along the tidal River Medway.

Current UK projections for future climate change indicate that there will be more frequent short duration high intensity rainfall and more frequent periods of long duration rainfall.

Sustainable Urban Drainage Schemes (SuDs)

Sustainable Drainage Schemes are a way of managing surface water flood risk. The surface water can be managed by using green spaces to capture water in natural features like swales, ponds, tree pits and rain gardens to allow it to soak into the ground or be evaporated. This reduces the need for traditional piped drainage networks to be used to manage surface water within the built environment. SuDs can also provide amenity value, reduce the impacts of climate change, and create spaces for nature.

Green infrastructure is recognised as one of the key assets used for implementing or retrofitting SuDs. An increased frequency of intense rainfall events, combined with a drainage network that quickly reaches capacity, will lead to more frequent flooding, but by allowing surface water, which would normally enter this network, to discharge into green space will help to reduce the risk of flooding.

New development could incorporate SuDs schemes that are integral to the GI provided, including providing a management and maintenance plan that will improve the water quality by removing pollutants and putting clean water back into the environment. Plants and vegetation will help provide essential food and habitat for local wildlife, and benefit biodiversity overall.

However, new development forms only a small part of the current urban areas. If retrofit SuDs can be incorporated into existing developed areas, then the opportunities for delivering sustainable solutions that offer multiple benefits will be much greater.

SuDs scheme for a residential development – Susdrain.org

There are many opportunities for taking a different approach to managing surface water that fits into the current urban landscape, whilst also addressing the issues of flood risk and water quality management. SuDS are known to be more adaptable and flexible than traditional solutions, allowing future modification to cope with climate and other changes in urban areas.

Retrofitting SuDS can potentially help solve some of the flooding risks and water quality problems that may be faced in Medway, now and in the future. Such measures provide a more joined up approach to managing surface water across wider areas, supporting the water cycle as a whole, helping to green urban areas and generating multiple benefits in-line with an ecosystem's services approach.

Planning SuDs that are an integral part of future green infrastructure is key to the success of future development, including arrangements for maintenance – which needs to be understood and planned in the early design stages.

Drivers of Change, Pressures and Threats

- National Planning Policy expects Local Plans to account for water management via the consideration of flood risk, coastal change, climate change, water quality, water supply and wastewater.
- The Medway Towns are at risk of flooding from a number of sources, including tidal and surface water flooding, as well as flooding from groundwater, streams and ditches
- Current UK projections for future climate change indicate that there will be more frequent short duration high intensity rainfall and more frequent periods of long duration rainfall. Climate change is also expected to bring hotter, drier summers alongside wetter winters but not necessarily in tandem.[52]
- Summer droughts are also likely to be more frequent alongside an increased risk of flooding. This combined with increased demand from development requires a proactive approach to the management of these risks via the planning system.
- Wetland biodiversity and habitats are at greater threat from climate change impacts than other habitats.
- An increased population will lead to demand for water.

River Medway at Upnor / St Mary's Island

Needs, Opportunities and Priorities

1. **Incorporate SuDs schemes into new development and retrofit into existing green infrastructure where such an approach is appropriate to help address flooding issues.**

    1.1. Integrate SuDS into the design of new green infrastructure rather than a separate feature and consider and include future maintenance of the system in the early stages of SuDS design.
    1.2. SuDS should be designed to support biodiversity and amenity uses.
    1.3. Look at ways in which SuDS can retrofitted into existing open space can be retrofitted to alleviate surface water flooding in areas where it is a problem.
    1.4. Community consultation should be undertaken when retrofitting SuDS.

2. **Protect water resources and protect and enhance the biodiversity value of water and wetland habitats.**

    2.1. Enhance the biodiversity of wetland features of the Medway and Swale estuaries and other wetland features of Medway through working with partners and landowners.
    2.2. Ensure water recreation and biodiversity interest are balanced.
    2.3. Engage people with Medway's outstanding wetland, riverine, marine and coastal wildlife to increase knowledge and action to protect these environments.
    2.4. Support actions to reduce water consumption.
    2.5. Increase access to the riverside, ensuring that this does not conflict with its outstanding natural biodiversity.

Landscape Character and Heritage

Introduction

There are a wide range of different landscape types in Medway - coastal marshes, chalk downland, orchards and shelter belts, large-scale arable farmland and extensive tracts of woodland. It also includes landscapes that are strongly influenced by the built development.[53] The diverse landscape character underpins Medway's green and blue infrastructure assets, providing its population a unique 'sense of place' in which to live, work and play.

To the north of the Medway towns is the Hoo Peninsula, a large finger of land surrounded by the Thames and Medway estuaries. South of the Medway towns, the landscape slopes gently upwards to the North Downs, with a distinct valley where the River Medway cuts through the North Downs.

This unique topography of hills, valleys, woodland, rivers and salt marsh has sustained life in the area for millennia - the earliest known settlement is evidenced through the early-Neolithic chambered long barrows of the lower Medway Valley, dating to around 4,000 BC.[54]

Medway's location on the rivers Medway and Thames provided the basis for the first settlements. The deep-water, mud-banked River Medway allowed the repair and storage of ships, in turn supporting ports, wharves and industry, alongside the Royal Navy Dockyard and its fortifications, barracks and defensive structures.

The Medway and Thames rivers are engrained in the cultural heritage of Medway and have long been the lifeblood for settlement in the area, providing food, raw materials, transport, employment, leisure, artistic inspiration and even protection from invasion.

Medway benefits from a wealth of heritage assets, many of which are protected under designations including Listed Building, Scheduled Ancient Monument, Historic Parks and Garden, or are within a Conservation Area (see Plan 16).

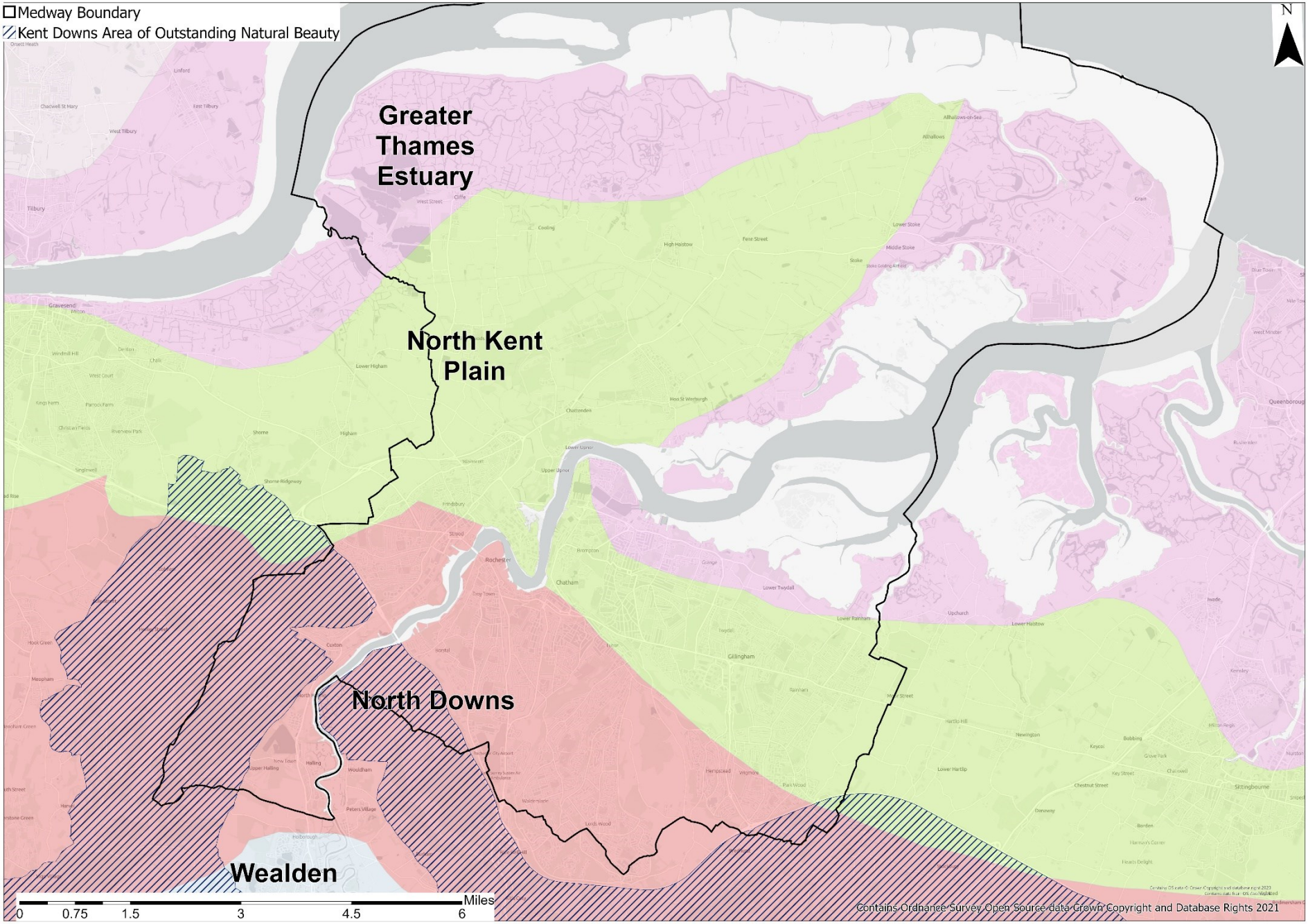
Medway's heritage has an increasingly important role in supporting sustainable growth and stimulating regeneration. Integrating heritage assets into regeneration schemes has been shown to create popular, successful developments, bringing life back into under-performing or neglected areas.

The history of Medway has also shaped the landscape and green and blue infrastructure. Medway's industrial heritage, for example, has created many quarries which are now wetlands or lakes, historic piers providing access to the riverside and the fruit belt of the 'Garden of England'.

The Great Lines Heritage Park Vision and Masterplan highlights the benefits of increasing the quality and quantity of publicly accessible greenspace and heritage at the heart of Medway and providing a major green link between town centres and a significant health and well-being asset.

Due to the diverse topography in Medway where a number of valleys and a river characterise much of the area, a number of strategic viewpoints become apparent. These viewpoints highlight some of Medway's landmark buildings, such as the Covered Slips in the Historic Dockyard, or the many historic churches (such as St Mary Magdelen in Gillingham, All Saints in Strood, Hoo St Werburgh, and St Margarets in Rochester) that occupy the higher ground in Medway. It is landmarks such as these that define much of the Medway's broad landscape and skyline, providing a unique and identifiable character.

Plan 15: National Character Assessment Areas and Kent Downs National Landscape



Landscape Character

Landscape character underpins green and blue infrastructure planning. Green infrastructure actions and new green infrastructure needs to take account of the landscape character of the surroundings. An updated Medway Landscape Character Assessment was published in 2024.

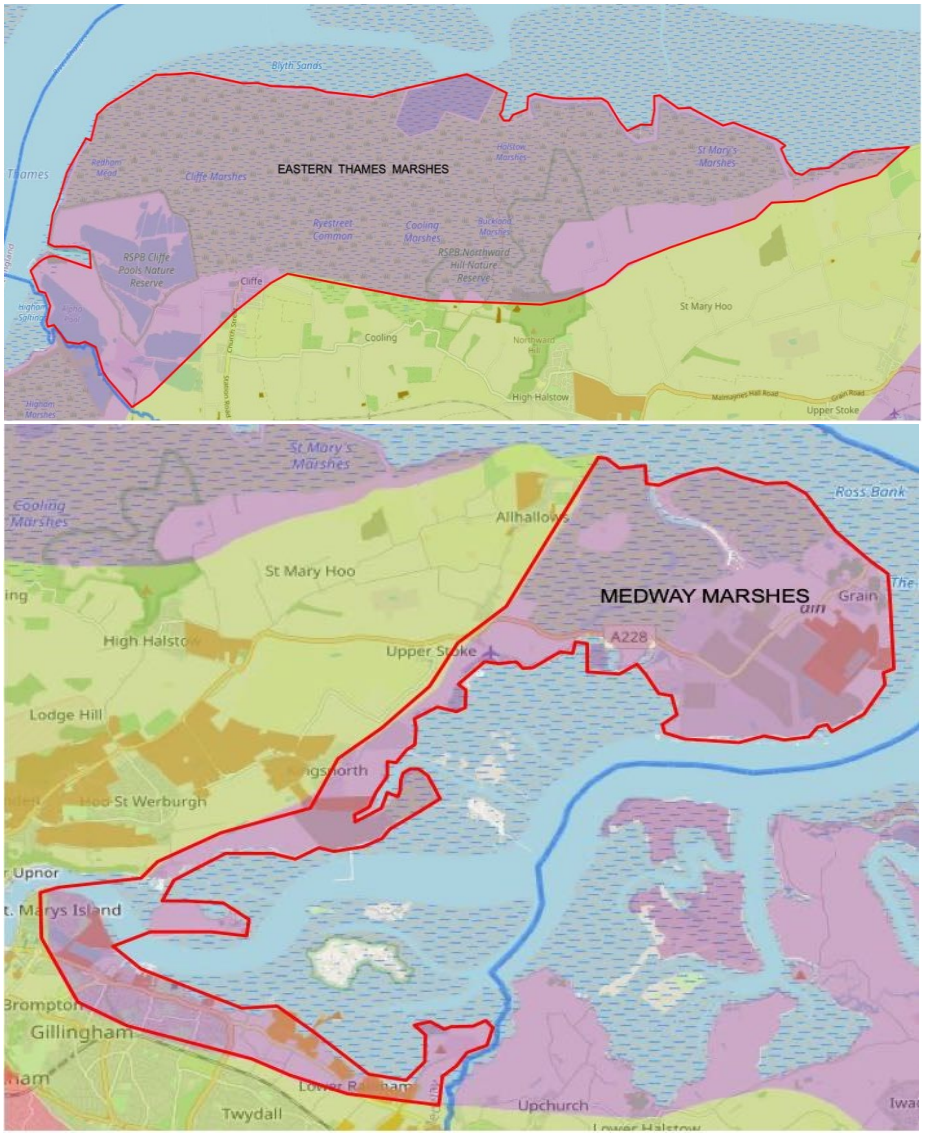
Three National Character Assessment Areas (NCAs) cover Medway - the Greater Thames Estuary (NCA 81), the North Kent Plain (NCA 113) and the North Downs (NCA119).[55]

Greater Thames Estuary (NCA 81)

The Greater Thames Estuary NCA is a remote and tranquil landscape of shallow creeks, drowned estuaries, low-lying islands, mudflats, broad tracts of tidal salt marsh and reclaimed grazing marsh. Sea defences protect areas of reclaimed grazing marsh, its associated ancient fleet and ditch systems and productive arable farmland. Historic military landmarks are characteristic features of the coastal landscape.[56]

Medway's Landscape Character Assessment sub-divides this landscape into two principal landscapes:

- Eastern Thames Marshes – Further subdivided into two character areas.[57] This is a predominantly remote and tranquil area with uninterrupted views into the Thames Estuary. It is a landscape with high cultural value with long, open views, absence of tree cover and restricted access. This area is an important natural asset providing a distinctive 'sense of place' and natural beauty.[58]
- Medway Marshes - Further subdivided into four character areas.[59] This is an area of open expansive areas of marshland with big skies and wide views; including large areas of water which contribute to a strong sense of place. A strong urban/industrial influence affects the rural character leading to transitional landscapes, including urban fringe influences along the southern side of estuary and industrial fringe influences along the northern side.[60]

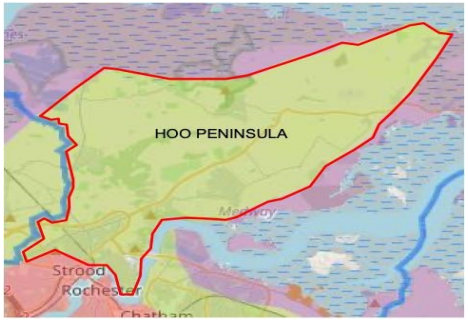


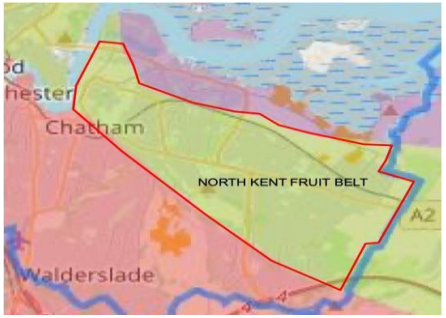
The North Kent Plain (NCA 113)

The North Kent Plain NCA is the strip of land between the Thames Estuary to the north and the Kent Downs to the south. The area is a low and gently undulating, generally open landscape. Shelterbelts occur in the fruit-growing areas, but the agricultural land is mostly devoid of hedgerows, although there are some significant ancient woodlands.. It is a very productive agricultural area with traditional orchards, soft fruits and other horticultural.[61]

Medway's Landscape Character Assessment subdivides this landscape into two principal landscapes:

- Hoo Peninsula - Further subdivided into a further 12 character areas.[62] This mainly agricultural area links to marshland along north, south and eastern edges. A central clay ridgeline with woodland to upper slopes forms the central backbone and creates a visual barrier between north and south.[63]
- The North Kent Fruit Belt – Further subdivided into three character areas.[64] This mainly rural agricultural landscape is characterised by a complex pattern of orchards, shelter belts, arable, pasture and horticultural crops, divided by small blocks of woodland. A relatively small part of this distinctive countryside is within Medway; the larger part stretching east towards Faversham.[65]



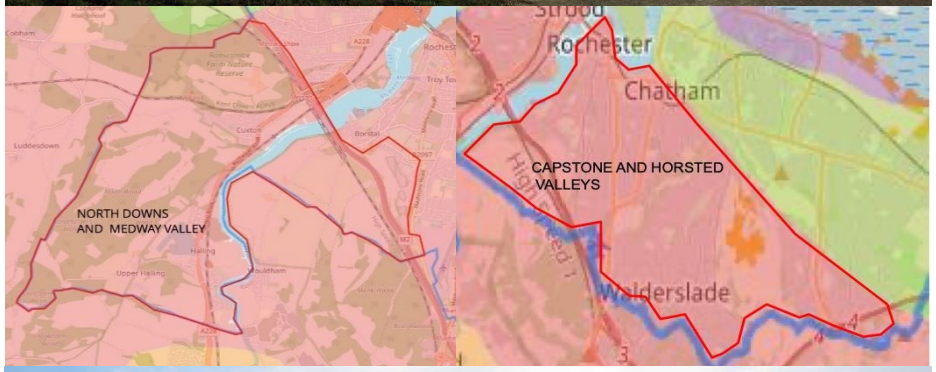


The North Downs (NCA 119)

The North Downs NCA chain of chalk hills stretches from Surrey to the White Cliffs of Dover. It is a landscape of small villages and scattered farms, of sunken lanes and ancient drove roads. Agriculture is important with many ancient woodlands.

Medway's Landscape Character Assessment (2011) subdivides this landscape into two principal landscapes:

- Capstone and Horsted Valleys – Further subdivided into seven character areas.[66] This landscape has dramatic scarps and valleys and a softer rolling open plateau. The southern section is within Maidstone. It contributes to the setting of the Kent Downs AONB and forms a green wedge linking urban communities into the countryside and the North Downs. It also connects into the heart of urban Medway with potential for improved links to the Great Lines Heritage Park. It is a valuable landscape near densely populated urban areas, offering significant health and recreational benefits.
- North Downs and Medway Valley – Further subdivided into 13 character areas.[67] The North Downs has wooded scarp top and steep sides with large arable fields to lower slopes, rolling dry valleys and strong woodland features. Heritage features include the Pilgrim's Way, historic lanes and farm settlements. Ancient woodlands, chalk grasslands and regenerating chalk quarries have high biodiversity. The mixed farmland of the Medway Valley's lower scarp slope and valley floor is fragmented by disused quarries. There is some grazed marshland, flood defence walls and reed beds. Boundary treatments are in variable condition. The areas retain rural character but with rural fringe intrusions and some detracting features such as railway lines, busy roads and industrial areas.



Heritage

There are many important heritage assets in Medway. Designated heritage features are show in Plan 16. Plan 17 shows some of the important heritage sites which are either greenspaces themselves or are in a greenspace setting.

Seen together in the wider landscape today, the presence of historic sites is marked by the surrounding green infrastructure, as it jostles with sprawling urban development. The loss of open uninterrupted meadows between military sites due to urbanisation has eroded the once impressive views of military presence along and above the River Medway. However, Chatham's distinguished history remains readable from vantage points in the urban landscape and townscape, in near, medium, and long-distance views. These vantage points are part of the green infrastructure network and have much to contribute to community placemaking and identity as well as biodiversity.

There are also many other sites not shown on the plan, for example churches, military structures and churches, along with several of Medway's listed buildings, which have significance to green and blue infrastructure.

Military and Defence

Military and defensive structures have had an extremely important influence on the historic landscape in Medway. The earliest evidence of military occupation in Medway dates to the Roman invasion of England and subsequent settlement at Rochester in 43 AD. 1547 saw the arrival of the Royal Navy to the River Medway, when Chatham Dockyard was established. Chatham remained an important naval base and dockyard through to the late 20th century.

Hoo Fort

Many forts were built in strategic places and now overlook or are set in important areas of greenspace. Many fortifications were constructed in the 19th century on the Hoo Peninsula, including Slough Fort, Grain Fort, Hoo Fort, Darnet Fort and Cliffe Fort. Nearby Cliffe Explosives Works is also a scheduled monument, now set in isolated and peaceful surroundings with views of the abandoned buildings and ruins. Other fortifications were land facing - Fort Darland, Fort Luton, Fort Horsted, Fort Bridgewoods and Fort Borstal. These fortifications were positioned in a semi-circle on hilltops to oversee approaches at a distance of approximately 2 miles from Chatham Dockyard. Each fortification was surrounded by a large field of fire, kept clear to deny an approaching enemy of cover. Today, the Field of Fire at Great Lines is now part of a locally designated Heritage Park. It is valued as an open space with public access. The wide views it offers over Fort Amherst, Chatham town and the River Medway are of great landmark and scenic value. There are also many 20th Century defences, built for both the World Wars, such as pillboxes or gun emplacements, which are listed would also have had an open green or blue field of fire.

Field of Fire

Historic Gardens

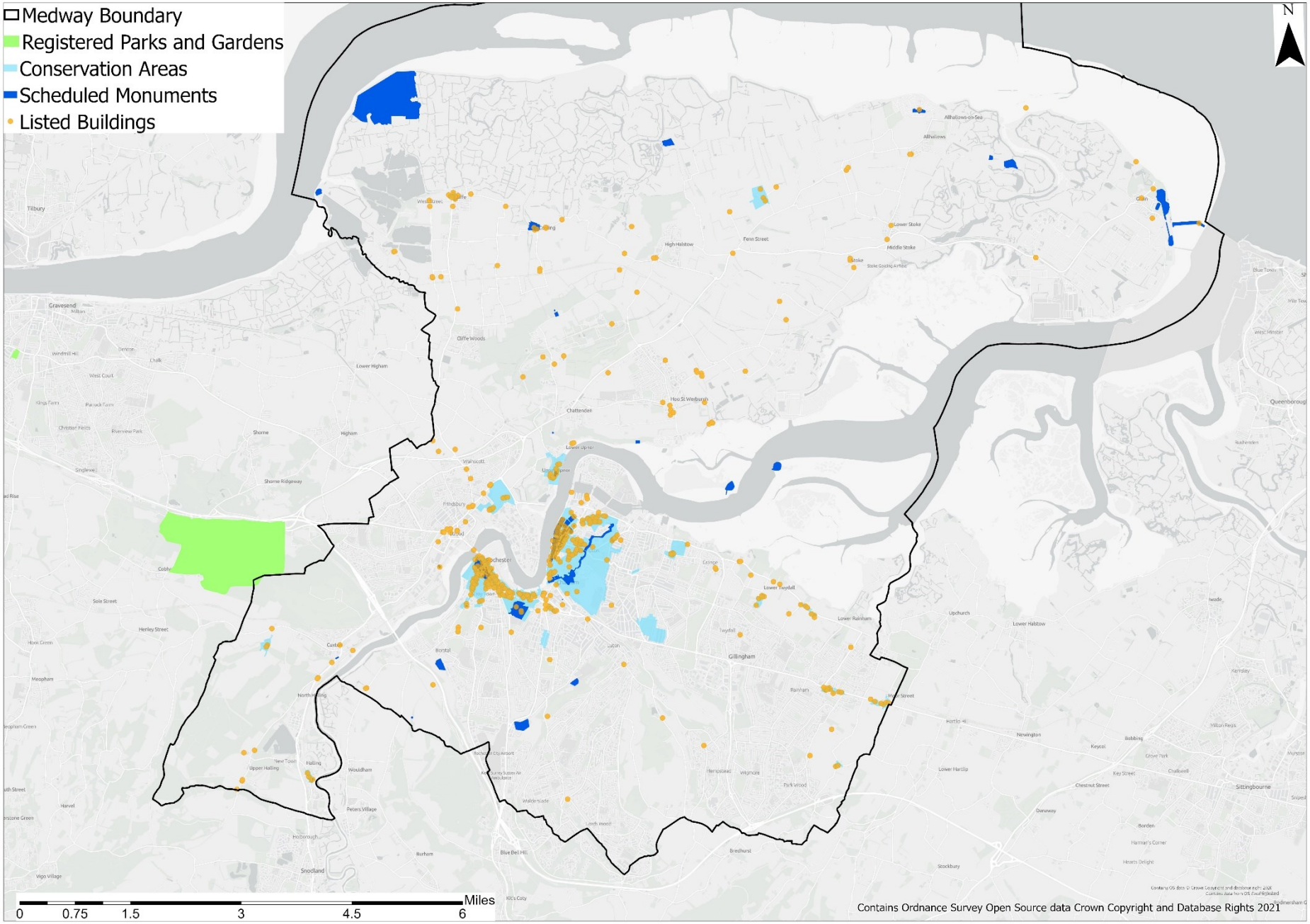
There are many historic parks and gardens in Medway. Kent Gardens Trust has reviewed around 30 historic parks and gardens in the Medway area to assess their value and significance.[68] Most of the gardens are situated in urban areas and many are open to the public.

Eastgate House in Rochester has several surviving features of the Arts and Crafts garden designed in the 1920s by the renowned architect, Sir Guy Dawber. There are several other designed and historic green spaces to the south of the centre of Rochester which provide relaxing places for the local community and a social and communal connection with the City's ecclesiastical history. Bishopscourt Garden, for example, is built on raised ground and has extensive views to the River Medway and Rochester Castle. Jacksons Field, Fort Pitt Gardens and Victoria Gardens also contribute to the scenic quality of the wider area through the panoramic views they offer over the towns, the River Medway and beyond.

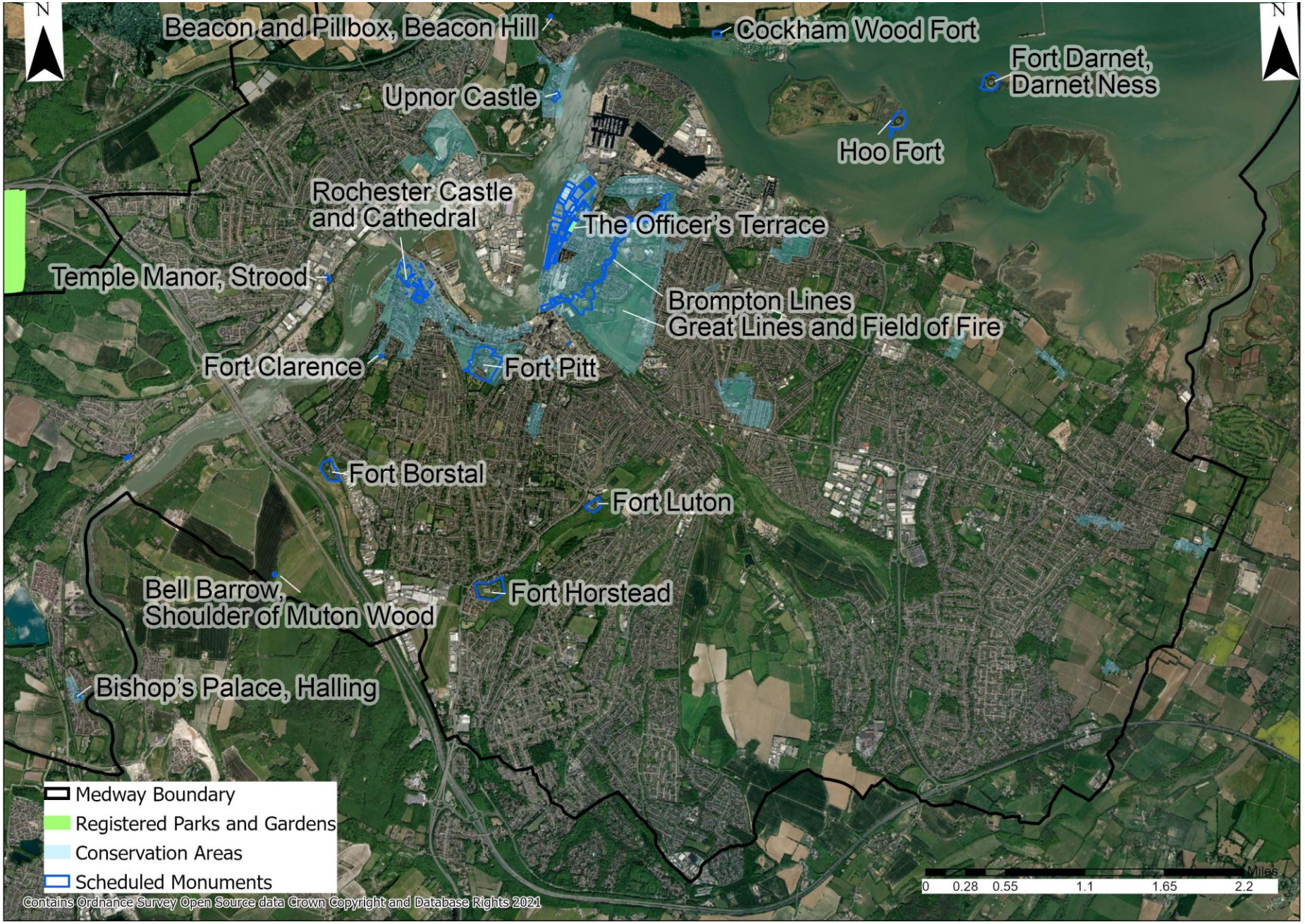
Gillingham Park is a good example of an intact, surviving Edwardian Park layout in a style promoted by the influential 19th century horticulturalist and writer JC Loudon.

These gardens greatly contribute to the green infrastructure, urban fabric and local character and distinctiveness of Medway.

Plan 16: Heritage Assets



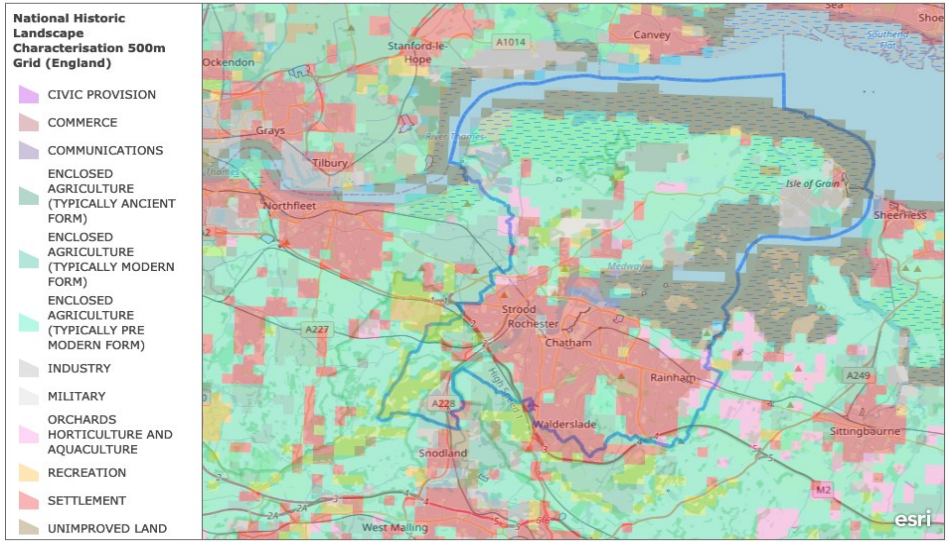
Plan 17: Some Heritage Sites with significance to Green and Blue Infrastructure (Urban Medway)

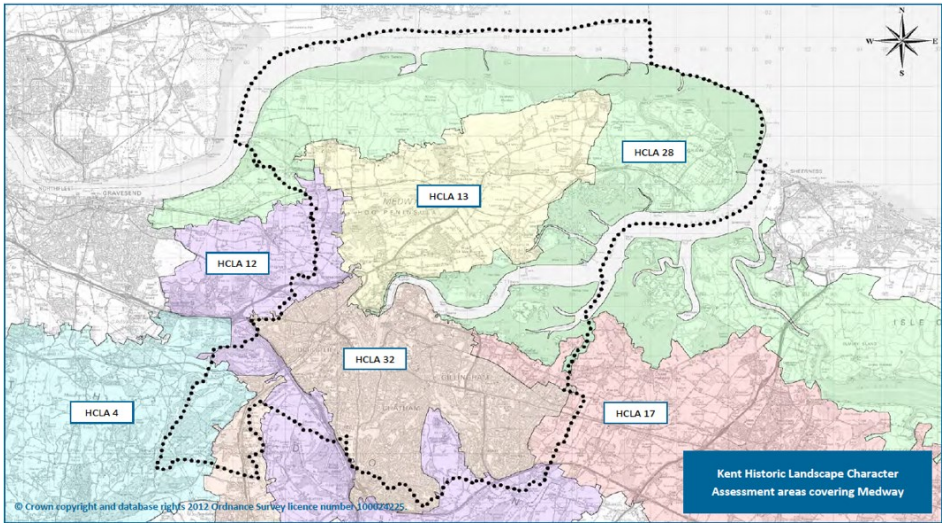


Historic Landscape Characterisation

Historic Landscape Characterisation (HLC) helps to define local distinctiveness and historic environment characteristics. The National Historic Landscape Characterisation, covering all of England, is derived from existing sub-regional HLC. It can be used strategically in land management, forward planning and assessing and monitoring change.[69] The Kent HLC[70] details six areas in Medway:

- Western North Downs (HCLA 4) – A varied area dominated by regular fields, significant post-1801 settlement, woodland and fields bounded by paths and tracks;
- Rochester/Chatham Hinterland (HCLA 12) – Prairie fields, with coppice woodland surviving on steep slopes or poor soils;
- Hoo Peninsula (HCLA 13) – A distinctive landscape of irregular fields bounded by tracks, roads and paths, coppice woodland, orchards and settlement;
- Northern Horticulture Belt (HCLA 17) – An area mainly characterised by horticulture activity and orchards;
- Northern Coast and Marshland (HCLA 28) – An area of reclaimed marsh and coastal landscapes, typifying the relationship between humans and the marine environment;
- Urban Conurbation (HCLA 32) – Blocks of urban conurbation, including industry and recreation, arising since 1801, reflecting large-scale population shift and growth.





Drivers of Change, Pressures and Threats

- Loss of the distinctive landscape character and biodiversity of the eastern Thames and Medway Marshes because of loss of inter-tidal areas and salt marsh;
- Loss of the distinctive landscape character of the North Kent Fruit Belt because of development, orchard loss, poor land management and changes of land use;
- Intensification of agricultural from the mid-20th Century resulted in the loss of hedgerows and woodland;
- Impact of new development on landscape character due to coalescence between rural settlements and new, hard, urban edges affecting character and local distinctiveness;
- Loss of local distinctiveness resulting from a move away from traditional farming land uses (e.g. orchards, pasture) and the introduction of intrusive elements relating to new land uses;
- Fragmentation of landscape and lack of connectivity because of infrastructure, such as pylons, power lines and roads, particularly on the Hoo Peninsula;
- Negative impact of new development on the setting of cultural assets, particularly in Conservation Areas, and the setting of Listed Buildings and Scheduled Ancient Monuments;
- Threat from new development to ancient woodland, including fragmentation and loss of woodland edge habitats and features;
- Loss of rural character of ancient lanes because of new patterns of settlement, increased vehicular usage, and insensitive signage;
- Loss of archaeological remains as a result of development or land management;
- New industrial complexes, pressure to increase housing provision and ancillary structures including roads and associated developments all form growing pressures on the character of the landscape. Such developments may be particularly visible within the flat landscape of the estuary;
- Tourism and formal recreation-related uses of the estuary and increasing visitor pressure may reduce the feeling of remoteness and wilderness in some areas;
- A requirement for increasing renewable energy generation could have an impact in Medway;
- Through climate change, sea level rise is likely to result in significant losses of salt marsh and other habitats through coastal squeeze, with increased pressure on coastal defence structures due to reduced wave attenuation by the salt marsh and pressure on active dynamic coastal processes;
- Climate change may result in changes to the type of crops which are grown and changes in land management in response to climate change, potentially having an impact on biodiversity and landscape character.

Needs, Opportunities and Priorities

1. **Strengthen landscape character and ensure green and blue infrastructure enhances and fits with local landscape character.**

    1.1. Protect transitional landscapes around urban fringe and built development from insensitive development and from urban–rural fringe activities that might erode distinctive character and degrade landscape condition.
    1.2. Creation of a strongly wooded landscape framework, with extensive broad leaved woodland planting in large blocks.
    1.3. The use of linear planting along roadsides to reduce the intrusion of traffic and the suburbanising influence of ribbon development, strong belts of woodland along major roads.
    1.4. The planting of hedgerows, shelter belts and small woods around the fringes of built areas, to reduce their visual intrusion and provide a strong landscape framework into which future development can be absorbed.
    1.5. Strengthening and reinforcement of natural features like watercourses as accessible green corridors linking built up areas with the wider countryside.

2. **Open countryside, particularly on the fringes of urban areas has an important role to play in buffering, separating and protecting the local identity of different communities.**

    2.1. Kent Fruit Belt and all areas of ancient woodland and chalk grassland. Retain a strong sense of local distinctiveness and rural character within countryside areas.
    2.2. Strengthen and reinforce landscape structure in urban–rural fringe areas and across the wider countryside. Ensure that the edges of new and existing urban and rural settlements blend comfortably with the surrounding countryside.
    2.3. Protect and enhance high quality landscapes along the Thames and Medway estuaries; the landscape of the North Downs; the traditional orchard and shelter belt field pattern of the Kent Fruit Belt.

3. **Ensure heritage is recognised in green infrastructure planning and interpretation.**

    3.1. Promote and enhance cultural heritage assets within rural and urban areas, and where appropriate enable multifunctional green infrastructure.
    3.2. Improve accessibility of cultural heritage sites through sustainable transport links and enhanced interpretation (where appropriate).
    3.3. Identify heritage which contributes to the urban fabric and local distinctiveness which can be used to guide future development.
    3.4. Identify and protect important viewpoints of heritage assets and ensure that the historic natural environment is respected and interpreted through new development.
    3.5. Protect distinctive and prominent landscape features; including views from the Thames and Medway estuaries and across the marshes; green backdrops, escarpments, wooded ridges and open farmed hills.

Part 2: Area Priorities

Introduction

To identify priorities, needs and actions at a more local level, Medway has been split into six areas. These areas have similarities in terms of characteristic or landscapes.

The six areas are shown in Plan 18 and are:

1 Hoo Peninsula;

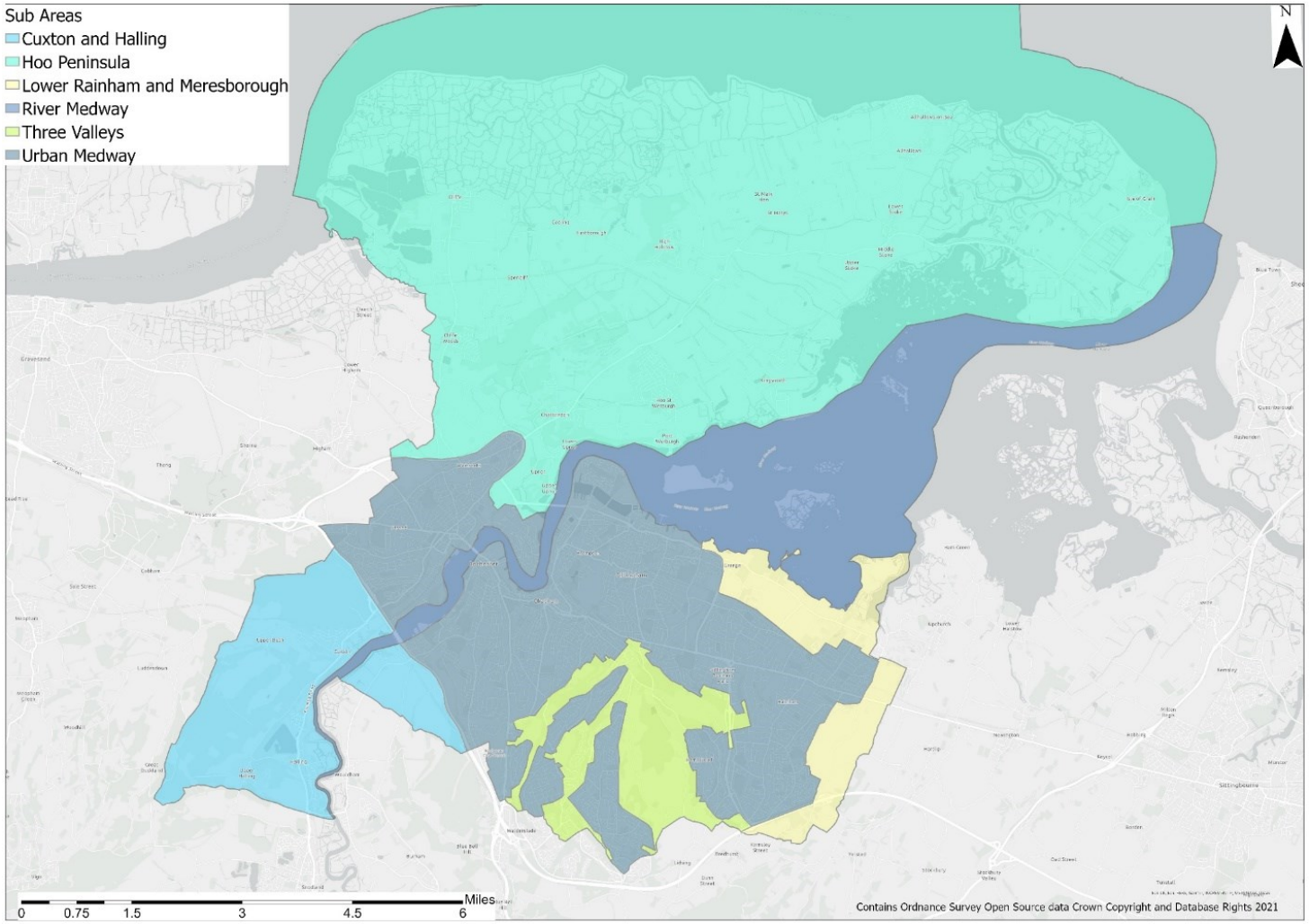
2 Wider urban Medway; within which the following areas are examined in more detail:

- 3 Lower Rainham and Meresborough;
- 4 The three green corridors of Horsted Valley, Princes Park and Capstone valley;

5 Cuxton and Halling; and

6 The River Medway.

Plan 18: Green and Blue Infrastructure Sub-Areas



Area 1: Hoo Peninsula

The Hoo Peninsula separates the Thames and Medway estuaries. It is formed by a central area of higher land, sloping to marshland to north and south. There are extensive areas of grazing marsh and coastal habitats, designated for their nature conservation importance.

The peninsula is one of contrasts - power stations and oil refineries lie near small historic villages; wild coastlines give way to holiday parks; historic castles and defensive forts of the past share the landscape with modern warehousing.

Overall, this is a predominantly remote and tranquil area, often with uninterrupted views into the Thames Estuary. There are open expansive areas of marshland with big skies and wide views, including substantial areas of water. This area is an important natural asset that provides a very evocative ‘sense of place’ and natural beauty.

There are some well-defined areas of distinctive historic landscape, characterised by irregular fields bounded by tracks, roads and paths, coppice woodland, orchards, urban settlement and recreational areas. Low and gently undulating, the central area is a generally open landscape. Shelterbelts occur within the fruit-growing areas, but the agricultural land is mostly devoid of hedgerows, although there are some significant ancient woodlands.

Historic military landmarks are very characteristic features of this landscape. Many are set in very isolated, and peaceful surroundings with views of the abandoned buildings and ruins.

Along the marshes a strong urban / industrial influence affects the rural character. The countryside on these urban / industrial fringes has an important role to play in buffering, separating and protecting the local identity of different communities. Drawing on the historic landscape features of this area will conserve the character and help to ensure that development is stitched carefully into the landscape. The distinctive cultural heritage could also provide important recreational opportunities along with sensitive access and interpretation.

The peninsula is outstanding for its bird life. The coast and associated inland habitats are of international importance for waders and waterfowl. The RSPB also has two nature reserves on the Peninsula, at Cliffe Pools and Northward Hill. Chattenden Woods on the peninsula’s central ridge is the country’s most important site for nightingales. The peninsula also supports some farmland birds. These species are now very scarce across the country. One of these is the turtle dove, which has been recorded on the peninsula. These very rare birds are now largely restricted to parts of East Anglia and South East England and it is estimated that their population is halving every 5 to 6 years. This is due to various reasons; lack of food and nesting habitat in the UK, spring hunting along their migration routes, and habitat loss at their wintering ground in Sub-Saharan Africa.

The Hoo Peninsula is crossed by many public rights of way. These include the 160 mile long Saxon Shore Way trail which begins at Gravesend and follows the former Roman coastline to Hastings. The route enters Medway near Cliffe, then passes through Cooling, High Halstow and Hoo St Werburgh, before following the estuary to Rochester. The King Charles III England Coastal Path around Medway and has the status of a national trail. This extends the Thames Path National Trail from Woolwich to Grain and is marketed as a ‘Source to Sea’ trail. The peninsula is also perfect for cycling. The 15 mile Heron Trail follows the quiet lanes of the peninsula, passing many heritage and wildlife sites.

Hoo Peninsula Historic Landscape Project

Landscape character is formed by the things that make an area unique, created by a particular combination of components. Landscape has its own heritage value, because it embodies an area's past and will shape its future.[71]

The Hoo Peninsula is one of the most distinctive and diverse landscape areas in Medway. In 2015 Historic England undertook comprehensive landscape heritage research for the Hoo Peninsula Historic Landscape Project, in response to proposed changes in the area and the potential threat from rising sea levels.[72]

The settlement patterns of the Hoo Peninsula reflect the intricate historic patterns of the topography, routeways, river access, military establishments and proximity to the major urban areas of the Medway towns and London.

The Hoo Peninsula's salt marsh was important for grazing and the exploitation of estuarine resources, such as shellfish and salt. Until the 19th century the arable areas of the Peninsula's central ridge would have been used for folding sheep, linked to the grazing on the marshes. The position of villages such as Cliffe, Cooling, Allhallows and Stoke may reflect this interface between arable and marshland areas. Whilst the central ridge now reflects 20th century large, open, arable fields, other areas retain more historic patterns, particularly notable in Cliffe where the medieval character of sub-divided but unenclosed fields remains. The unique nature of coastal farming led to a major shift in the mid-19th century, when fruit growing and market gardening on an industrial scale developed around railway stations.[73]

Defence and industry have also shaped parts of the Hoo Peninsula. Its position between the Thames and the Medway made it strategically important to the defence of both rivers.

Rapid industrialisation was due to the abundance of raw materials (such as chalk and clay), and also due to the flat, open and relatively uninhabited landscape with good river access.

People are attracted to the Peninsula for its landscape. Joining up the natural and historic environment agendas in this period of change for the Peninsula provides the opportunity for shared and improved outcomes

At the eastern end of the peninsula is the Isle of Grain and the tiny settlement of St James. Beyond, at the very end of the peninsula, is Grain Coastal Park; an area of grassland and wildflowers and accessible coastal paths.
There are significant areas of poor health in the east of the Hoo Peninsula where there are also few opportunities to access multifunctional greenspace. Here, cycle routes and public rights of way may perform an additional important function, especially to newly created multifunctional greenspace, particularly if these are also linked to form promoted recreational routes.

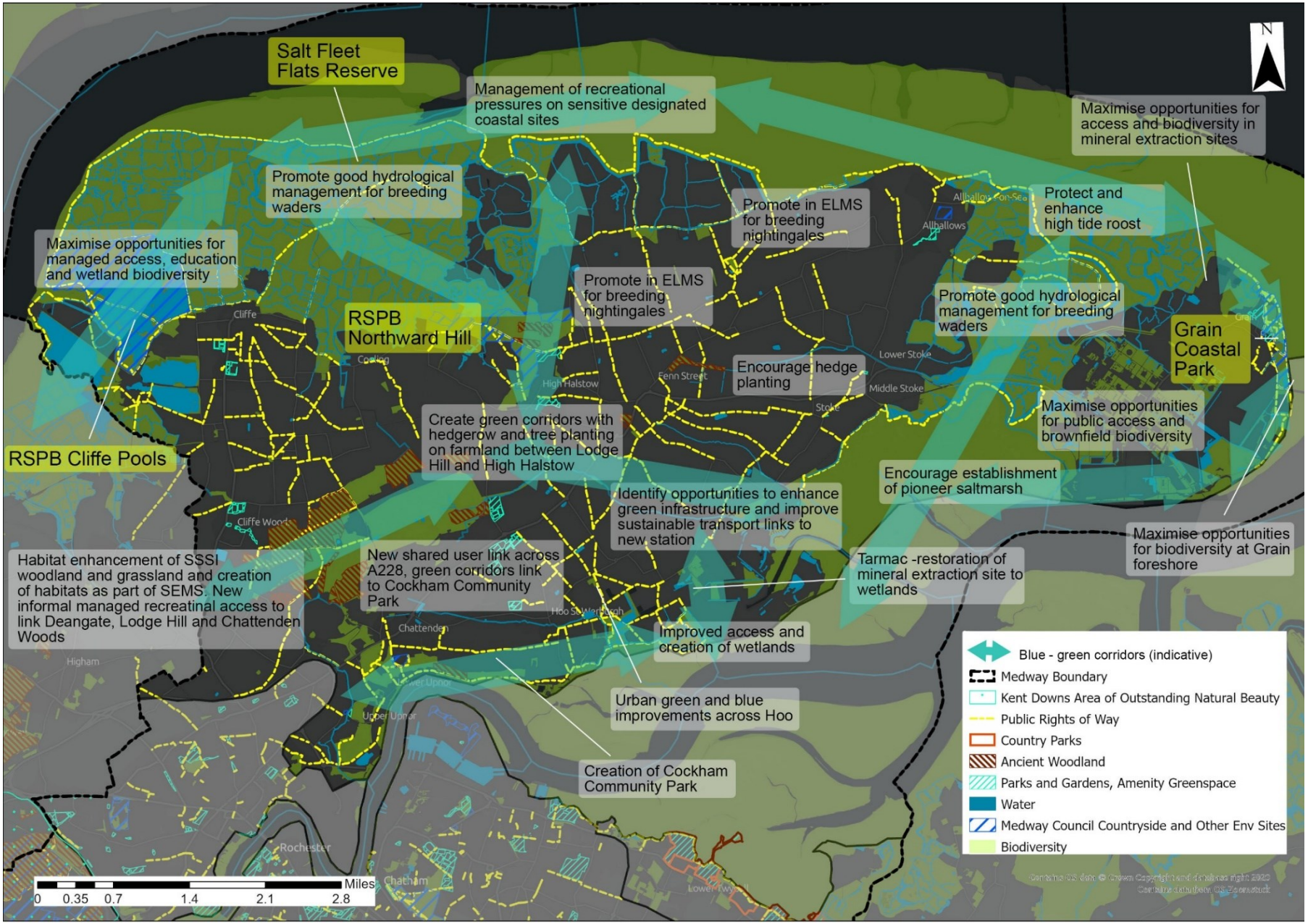
Priorities/Opportunities for this Area

- Landscape scale conservation through HIF, and with RSPB
- Promote habitat for breeding nightingales
- Protect and enhance high tide roosts
- Promote good hydrological management for breeding waders
- Maximise opportunities for managed access, education and biodiversity
- Enhancement of SSSI woodland and grassland and creation of habitats as part of SEMS. New informal managed recreational access to link Deangate, Lodge Hill and Chattenden Woods
- Urban green and blue improvements across Hoo
- Hoo Peninsula in strategic East Coast Flyway Unesco bid
- Opportunity for creation of Cockham Community Park
- Restoration of mineral extraction sites to wetlands
- Maximise opportunities for biodiversity at Grain Foreshore
- Maximise opportunities for public access and brownfield biodiversity at Isle of Grain
- Ensure bridleway network is preserved and enhance through HIF
- Create habitats for pollinators
- Grain Coastal Park actions Comments from ROWIP workshop wanted better quality paths.
- Better access to existing greenspace
- Seek new greenspace in areas where there is a deficit. Integrate green infrastructure into new master planning in ways that promote active travel, recreation and leisure, and support community and social engagement. Ensure that high quality greenspace is provided by new development so that everyone has access to greenspace close to home.
- Invest in public rights of way to ensure they are accessible to a wide range of people and implement more cycling routes, with a key route between Lower Stoke and Allhallows.
- Develop promoted walking trails and seek greenways and traffic-free routes where possible.
- Plan strategically to ensure accessible greenspace, cycle routes, walkable spaces and public rights of way are connected, especially in areas of development, so that opportunities are not lost and gains are delivered.
- Improve cycling and walking links into urban Medway.
- Prioritise improving access to greenspace in areas of deprivation or where there is poor or unequal access. Update and revise promoted routes using public rights of way, providing more information on accessibility.
- Create more spaces to support community growing – allotment facilities, gardens, edible trails and green walls and educate and support residents in utilising these.
- Establish interventions, such as green social prescribing initiatives, that will support people who do not use greenspace to begin using it.

- Improve accessibility of cultural heritage sites through sustainable transport links and enhanced interpretation (where appropriate), in particular the Hoo Stop Line.
- Identify heritage which contributes to the urban fabric and local distinctiveness which can be used to guide future development.
- Identify and protect important viewpoints of heritage assets and ensure that the historic natural environment is respected and interpreted through new development.
- Protect distinctive and prominent landscape features; including views from the Thames and Medway estuaries and across the marshes; green backdrops, escarpments, wooded ridges and open farmed hills.
- New green infrastructure should integrate SuDs into the design of the space rather than a separate feature, including the maintenance of the space as a whole and should be designed to support biodiversity and amenity uses. The arrangements for the future maintenance should be considered during the early stages of SuDS design as this will influence the design.
- Establish and promote the England Coast Path through this area.

Grain Foreshore

Plan 19: Hoo Peninsula



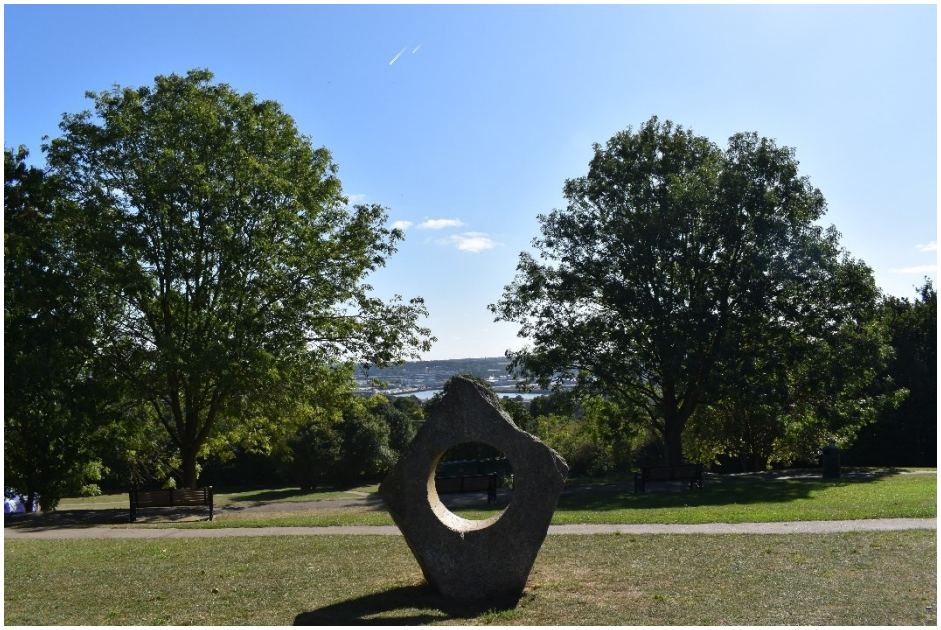
Area 2: Wider Urban Medway

This large area encompasses the majority of urban Medway (but excludes the areas described under the ‘Three Valleys’ and ‘Lower Rainham and Meresborough’ sub-areas). It includes communities on both sides of the River Medway.

The River Medway was the basis for the first settlements in the area. In 1550 Rochester was the only Medway town. It dominated the river estuary and an agricultural hinterland in which Strood, Chatham, Gillingham and Rainham were nearby villages, reliant on fishing and farming for their livelihood. By the beginning of the twentieth century these four towns had become an urban conurbation. The key factor in this dramatic change was the growth of the Royal Naval Dockyards at Chatham, home to the English fleet from the mid-sixteenth to the mid-eighteenth century. The deep-water, mud-banked River Medway provided opportunity for the repair and storage of ships, in turn giving rise to a number of ports, wharves and associated industries; along with the Royal Navy Dockyard and its associated military structures.

The need for many trades and building materials for dockyard and supplies for the ships lead to the growth of the towns and the - establishment of numerous local quarries, brickfields and timber yards. Due to excellent river access to London, manufacturing of bricks, cement and lime became a major industry in Medway. The social legacy of the industry, such as the terraces of housing that characterise many areas of Medway, can be readily identified.

The Chatham Navel Memorial at Great Lines Heritage Park



View of the River Medway from Broomhill Park, Strood

Medway's military past has played a significant part in shaping the current urban landscape and local distinctiveness – the Great Lines Heritage Park is a complex network of open spaces connecting Chatham, Gillingham, Brompton and the Dockyard. Medway's unique topography of hills, valleys, woodland, rivers and salt marsh has not only helped sustain and opportunities for commerce for its inhabitants but provides important views over the river, urban Medway and beyond to the countryside.

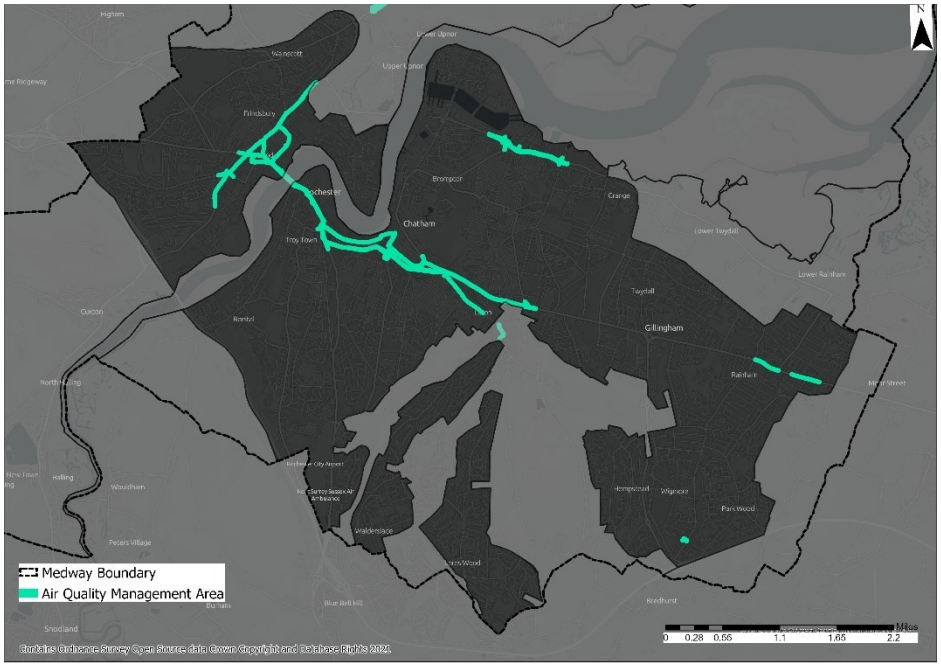
Other larger parks include Jackson's Field, Gillingham Park, Cozenton Gardens. On the western side of the River Medway, Broomhill Park and Rede Common Local Nature Reserve are large and important greenspaces. Other notable parks include The Strand, adjacent to the estuary at Gillingham and The Vines and other parks in historic Rochester. There are also many accessible semi-natural open spaces in urban Medway including Watts Meadow (Rochester)and Baty's Marsh as well as the important and extensive green corridors on the chalk ridges through urban Medway, described in the 'Three Valleys' sub-area.

There are deficiencies in supply of parks across most areas of Medway. Open space provision is low in Gillingham South, Rochester East, Strood North, Rainham Central, Chatham Central, Rainham South, Walderslade and Princes Park.

Urban Medway has some challenging health statistics to overcome. Life expectancy at birth for men and women and the under 75 mortality rate for cancer and circulatory diseases is significantly worse in Medway than the England average. Average life expectancy in rural areas is significantly greater than in urban wards and Medway has significantly higher rates of obesity than the England average. Good access to greenspace is vital and a well-designed, accessible environment can encourage people to walk or cycle, and people cycle more when there is cycle infrastructure and separation from traffic. Therefore, making it easier for people to walk and cycle to their destination is not only the greenest option, but one that brings significant physical and mental health benefits.

In recent years Medway has invested £2.5 million in cycling. It has created on-road cycle paths that make it easier to cycle safely get to places like Gillingham Business Park, Strood Retail Park, Rainham High Street and St Mary's Island. There are also schemes prepared to improve existing shared cycle and pedestrian footways in the district. However, it is also apparent that some communities with poor health outcomes have very good access to greenspace. There may be a need to drill deeper into local circumstances in these areas.

Plan 20: Air Quality Management Areas



There are also a several Air Quality Management Areas in this sub-area. Green infrastructure to mitigate impacts needs to be sought and planned into new development. Supporting active travel will also help to reduce polluting journeys in vehicles.

The Medway Towns are at risk of flooding from a number of sources, including tidal and surface water flooding, as well as flooding from groundwater, streams and ditches. A national assessment of surface water flood risk indicates that Medway is one of 116 communities throughout England which is considered to be at significant risk of surface water flooding. There are a number of areas in Chatham and Gillingham in particular, which suffer from surface water flooding.

Retrofitting SuDS can potentially help solve some of the flooding and water quality problems that may be faced in Medway in the future. Such measures provide a more joined up approach to managing surface water across wider areas, supporting the water cycle as a whole, helping to green urban areas and generating multiple benefits in-line with an ecosystem's services approach.

There is a strong urban regeneration programme in Medway. This includes many waterfront sites from Temple to north of Gillingham and town centre renewal, particularly in Chatham and Strood.

Medway's regeneration programme provides many opportunities to improve green and blue infrastructure. The river lends much to the placemaking of new development and there are opportunities to extend riverside access, which could be an iconic strategic project for Medway. The High Street and town centre regeneration programmes lend themselves to better and more inclusive public realm – for all sectors of the community – and to incorporate green infrastructure rather than 'grey spaces'. This, along with better connectivity for walking and cycling, will help to revitalise the urban centre and is critical to achieving the city function and profile which Medway is seeking.

Linking culture and art with regeneration and the improvement of green and blue infrastructure can help to add depth and resonance to projects and attract new audiences.

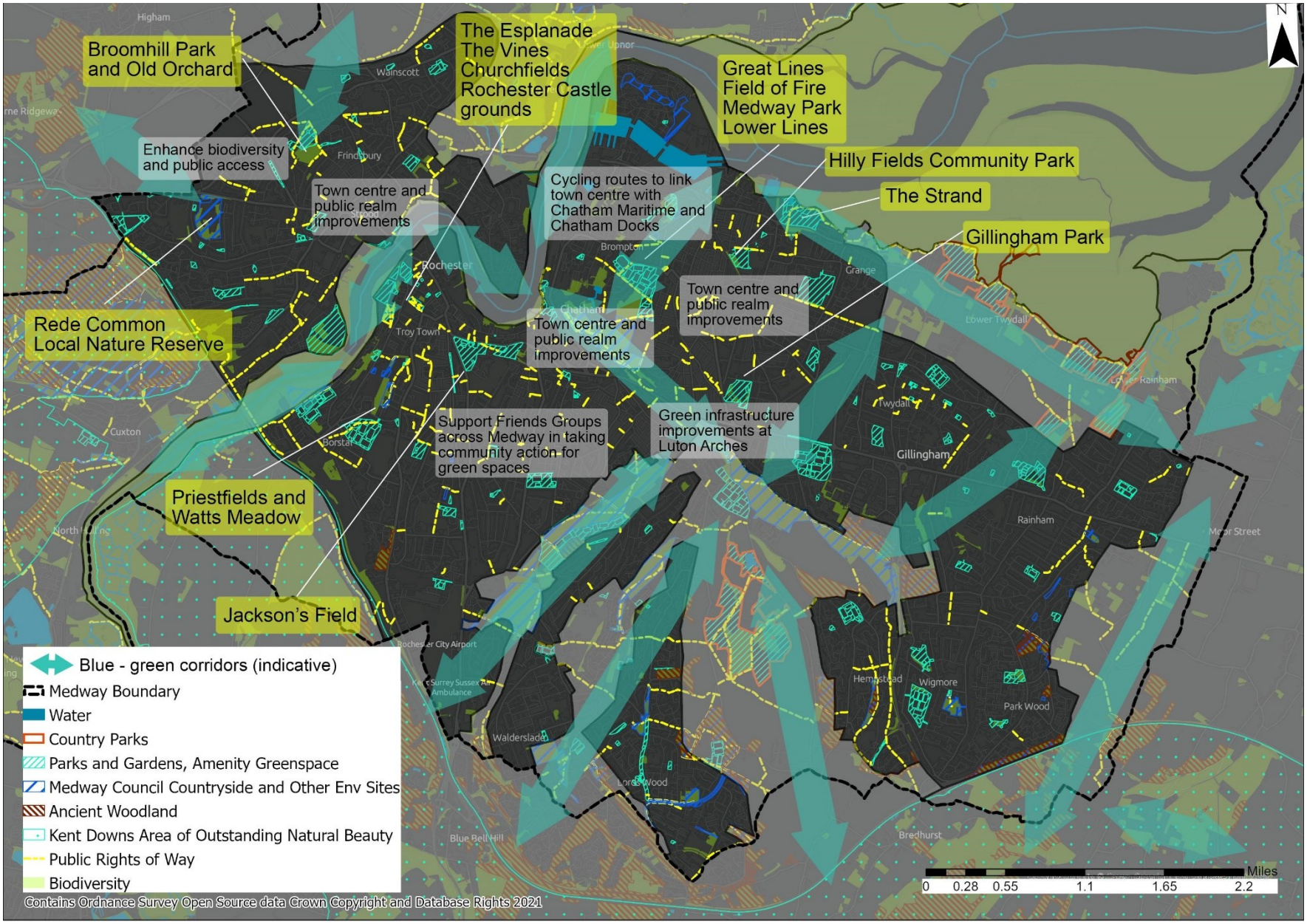
Priorities for this Area

- Enable better access to existing greenspace.
- Seek new high quality greenspace in areas where there is a deficit. Integrate green infrastructure into new master planning in ways that promote active travel, recreation and leisure, and support community and social engagement. Ensure that sufficient greenspace is provided by new development so that everyone has access to greenspace close to home.
- Invest in public rights of way to ensure they are accessible to a wide range of people and implement more cycling routes.
- Improve cycling and walking routes to Chatham Maritime from the town centre, and to the universities and colleges in this area.
- Develop promoted walking trails and seek greenways and traffic-free routes where possible.
- Create a green link from Chatham Waters / Docks along disused rail connection to link St Mary's Island / Chatham Maritime with Gillingham, addressing severance issues and promoting active travel through walking and cycling.
- Promote the King Charles III England Coast Path through this area.
- Seek to improve green infrastructure to help improve air quality and improve sustainable travel and public realm to encourage walking and cycling to reduce polluting travel in vehicles.
- Deliver green and blue infrastructure improvements in the Chatham Design Code, and Strood and Gillingham Town Centre Masterplans and incorporate more green and blue infrastructure into the public realm, e.g. a linear park along the creek in Strood and bringing connections to the river and Great Lines into Chatham town centre.[74]

The Vines, Rochester

- Deliver the green infrastructure proposals in the neighbourhood plan for Luton - Arches Neighbourhood Plan (Chatham), including ‘greening streets’, healthy walking routes to schools and the High Street.[75]
- Improve for pedestrians and cyclists in the Heritage Action Zone in Chatham Intra (lower High Street between Chatham and Rochester), and make connections to the river, incorporating and celebrating the heritage of this area.
- Plan strategically to ensure accessible greenspace, cycle routes, walkable spaces and public rights of way are connected, especially in areas of development, so that opportunities are not lost and gains are delivered
- Prioritise improving access to greenspace in areas of deprivation or where there is poor or unequal access. Update and revise promoted routes using public rights of way, providing more information on accessibility.
- Create more spaces to support community growing – allotment facilities, gardens, edible trails and green walls and educate and support residents in utilising these.
- Link with Medway’s Cultural Strategy – seeking cultural input into green and blue infrastructure regeneration projects.
- Establish interventions, such as green social prescribing initiatives, that will support people who do not use greenspace to begin using it.
- Improve accessibility of cultural heritage sites through sustainable transport links and enhanced interpretation (where appropriate).
- Identify heritage which contributes to the urban fabric and local distinctiveness which can be used to guide future development.
- Identify and protect important viewpoints of heritage assets and ensure that the historic natural environment is respected and interpreted through new development.
- New green infrastructure should integrate SuDs into the design of the space rather than a separate feature, including the maintenance of the space as a whole and should be designed to support biodiversity and amenity uses.
- The arrangements for the future maintenance should be considered during the early stages of SuDS design as this will influence the design
- Use the Tree Equity Score to measure how well the critical benefits of urban tree canopy are reaching those who need them most. Address disparities in urban tree distribution by identifying the areas in greatest need of people-focused investment in trees and retrofitting the planting and establishment of trees.

Plan 21: Urban Medway



Area 3: Lower Rainham and Meresborough

This area includes the largely undeveloped land along the southern edge of the Medway Estuary from Grange, through Lower Rainham to Otterham Quay, and south along the boundary of Medway district through Moor Street and Meresborough. It forms an important green wedge along the boundary of Medway and links to the surrounding countryside.

This is an area of farmland, of urban edges, of past industry and former docks. It remains a predominantly rural agricultural landscape characterised by a complex pattern of orchards, shelter belts, fields of arable, pasture and horticultural crops, divided by small blocks of woodland; gently rolling landform to the south of A2. However, there has been a loss of traditional orchards and increasing trend towards urban-rural fringe equine and amenity related activities.

Nonetheless, the open countryside provides a strong and distinctive buffer along northern edge for the Medway Marshes SSSI and maintains and strengthens green corridor and wildlife links from urban areas into countryside. Although this area has become partially fragmented by urban fringe it retains an essentially rural character.

There is the potential to strengthen access opportunities from urban areas into countryside, particularly if this can be accomplished with improvements to landscape quality, condition and local distinctiveness by taking integrated approach towards strengthening the coherence of the rural character.

This area has value as a green buffer, wildlife corridor and link to wider countryside and it offers openness and easy access to a countryside area for an extensive urban population. It also improves the setting of the Lower Rainham and Twydall Conservation areas and, along with the Riverside marshes area, it provides a distinctive green backdrop when viewed from the Medway estuary.

Riverside Country Park stretches along the bank of the Medway Estuary at Lower Rainham. This is one of Medway's two very popular country parks, receiving around 450,000 visitors annually, drawn from across Medway and beyond. A multi-user walking and cycling route follows the bank of the estuary, part of Sustrans' National Cycle Network Route 1. The country park includes Horrid Hill, a narrow spit stretching into the estuary, and Berengrave Local Nature Reserve. The latter is a former chalk quarry utilising the former Rainham Dock East. The country park also includes a community orchard on Lower Bloors Lane.

Horrid Hill, Riverside Country Park

Culturally this area has potential for greater understanding of how the marshes and farmland operated as a system and what impact this had for the landscape character and the location of settlements. between the river and the road network.

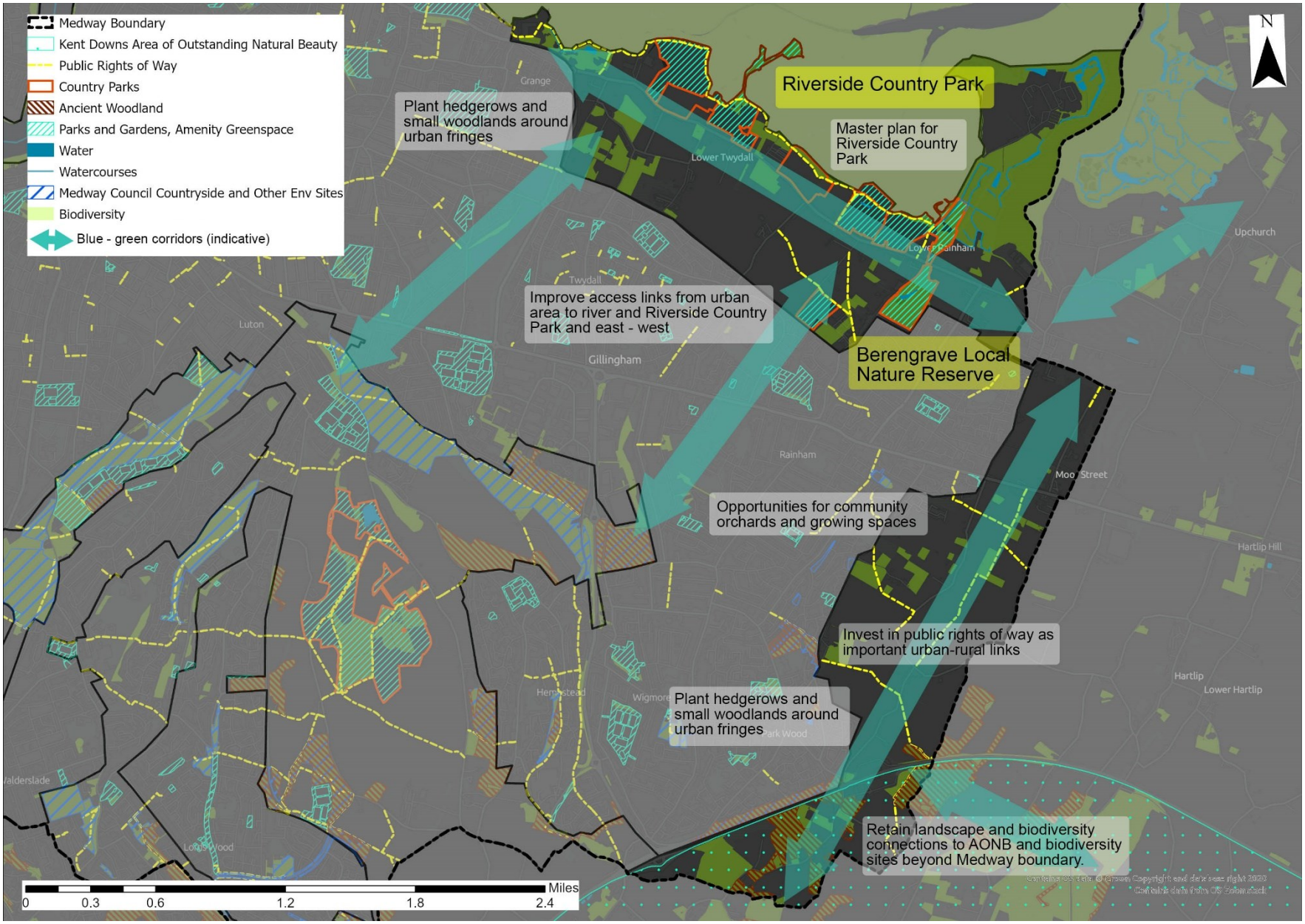
The health of the communities in this area is generally good. However, the urban area immediately adjacent to the south has areas of poor health. Riverside Country Park is an important open space for a wide catchment area but it is difficult to reach without a car. In particular there is a lack of public footpaths leading from the urban area to Riverside Country Park. Access is generally poor north to south and east to west, if this could be improved it could form important links for the urban population to the river and wider countryside.

There are some surface water flooding issues along the urban western edge of this area. Retrofitting SuDS can potentially help solve some of the flooding risks and water quality problems that may be faced in Medway, now and in the future, particularly if they can be coordinated with better access arrangements.

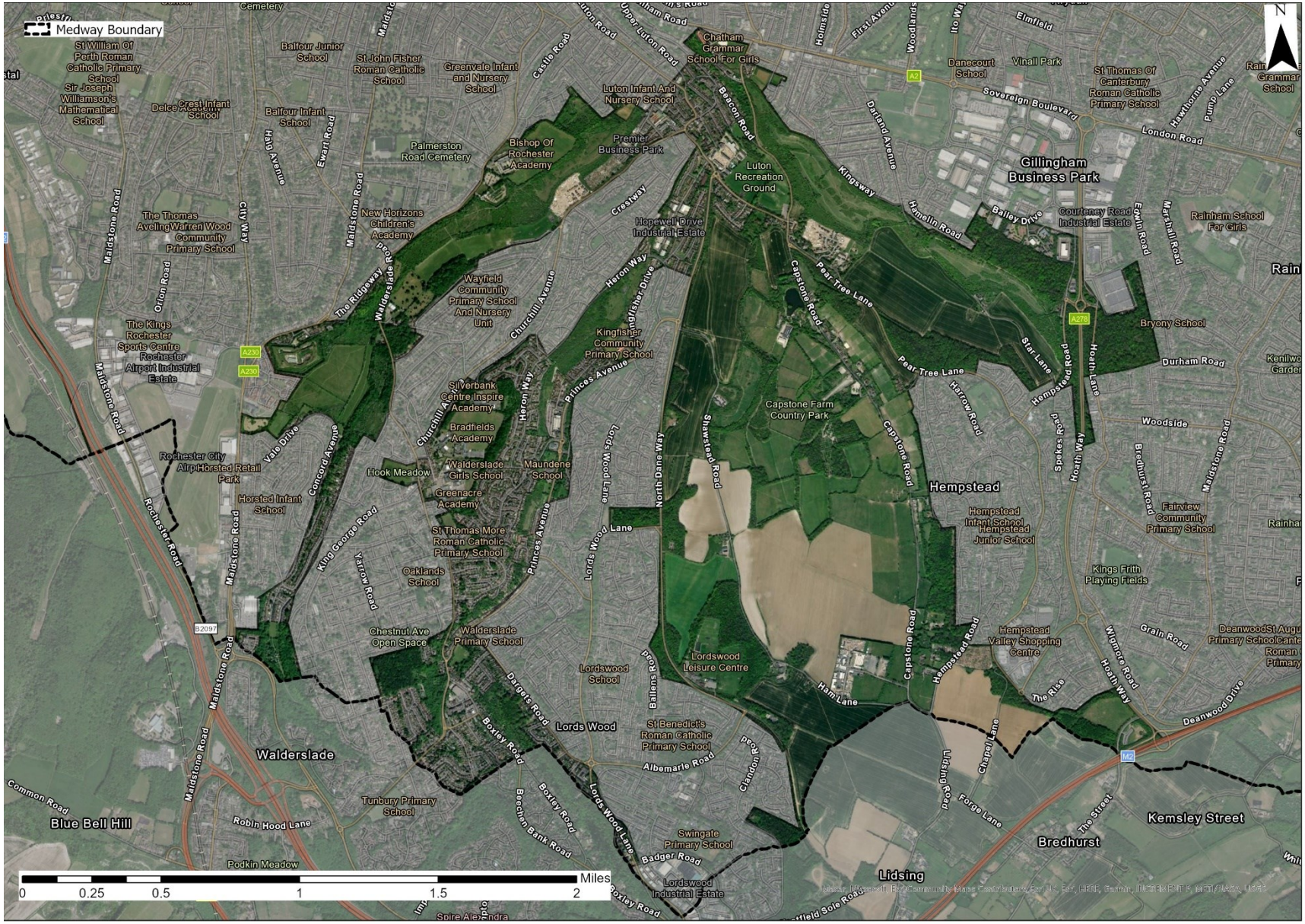
Priorities for this Area

- Develop new masterplan for Riverside Country Park, exploring options for the park's contribution to biodiversity and role in addressing climate change as well as quiet informal recreation.
- Explore links to surrounding area for sustainable travel including Twydall.
- Invest in public rights of way, particularly those linking town and countryside, to ensure they are accessible to a wide range of people.
- Promote the King Charles III England Coast Path through this area.
- Ensure improvements are carefully planned with local consultation to provide equitable and sustainable benefits and to understand the actual and potential local benefits of greenspace
- Ensure greenspace includes thoughtful and inclusive physical design, to deliver multiple outcomes to attract different population groups.
- Where development is taking place, ensure that public rights of way are improved and, where possible, provide multi-user routes and new connections, e.g. to the new secondary school, Moor Street.
- Maximise access for all to the riverside, with improved access to and along this route, as this has the potential to provide a level and attractive linear route for all abilities.
- Link town with countryside through improved routes and public rights of way.
- Create more spaces to support community growing – allotment facilities, gardens, edible trails and green walls and educate and support residents in utilising these. Link these to the area's cultural heritage of fruit growing and to healthy eating.
- Look at ways in which existing open space can be retrofitted to alleviate surface water flooding in areas where it is a problem
- Maximise the planting of hedgerows, shelter belts and small woods around the fringes of built areas, to reduce their visual intrusion and provide a strong landscape framework into which future development can be absorbed.
- Strengthening and reinforcement of natural features like watercourses as accessible green corridors linking built up areas with the wider countryside.
- Retain landscape and biodiversity connections to Kent Downs and biodiversity sites beyond Medway boundary.

Plan 22: Rainham and Meresborough



Area 4: Three Valleys – Horsted, Princes Park and Capstone



This area encompasses the three valleys through the centre of urban Medway. These corridors link Luton with the countryside, important habitats and ancient woodland and the Kent Downs Area of Outstanding Natural Beauty lying just beyond Medway's boundary.

This landscape falls into two distinct types; dramatic scarp and valley forms to north; softer rolling open plateau landscape to centre, two valleys bound central plateau to east and west and southern section within Maidstone.

The western Horsted Valley is a steep sided chalk valley linking Luton with Walderslade. In the northern, and steepest, section, chalk grassland remains at Daisy and Coney Banks, with amenity greenspaces at the base of the valley. In the centre of the corridor the valley broadens around the former Horsted Farm. These sites, along with amenity greenspace, provide continuous and valuable greenspaces. Fort Horsed and Fort Luton, both scheduled monuments, overlook the valley. At the southern end of the corridor is Taddington Valley, a grassland and woodland site managed by neighbouring Tonbridge and Malling Borough Council for wildlife and recreation, forming an important link beyond Medway into Walderslade woodlands.

The central valley has larger areas of development but nonetheless there is a clear green corridor linking north to south. The green corridors links from Princes Park, a semi-natural accessible greenspace, through the grounds of several schools to Chestnut Wood and Dargets Wood at the southern extent. These woodlands link into the wider Walderslade woodlands in neighbouring Maidstone and Tonbridge and Malling districts.

Coney Banks

At the head of the third valley lies the extensive and high quality chalk grassland of Darland Banks. The site is managed as a nature reserve by Kent Wildlife Trust. Ambley Wood and Grove Wood remain as remnants of ancient woodland. At the base of the steep slope remain areas of arable land.

To the south lies the broad Capstone valley. This distinctive natural landscape is the setting for Capstone Country Park and form part of the setting of the Kent Downs National Landscape. It also provides a distinctive edge to urban areas and prevents the coalescence of Lordswood / Princes Park and Hempstead. It is a 'gateway' to the AONB National Landscape and provides a key function as a transition zone between the Kent Downs and built up areas of Medway.

Despite some detracting features[76] this area retains a distinctly rural character and strong sense of overall coherence despite urban settlements on eastern and western flanks. There are attractive open views from upper slopes of valley.

Remnant chalk grassland on the steep slopes to the north lead to smaller fields of arable and pasture with larger arable units in southern section. Blocks of deciduous woodland are distinct features, particularly on shallower slopes and plateau landform. Small pockets of ancient woodland remain and are important biodiversity features - at North Dane Wood, Hook Wood, South Wood, Sindal Shaw, Chapel Hill Wood, Depot Wood and Ballens Rough.

Star Lane

The woodlands, grassland and hedgerows have significant landscape, recreational and ecological value and it is important to seek opportunities to strengthen landscape character by improving hedgerows and shelter belts and enlarging woodland areas.

Urban fringe activities can impinge on the valley, e.g. signage, fly-tipping and infill development. Planned uses should be more firmly geared toward a rural and agricultural character of surrounding area and avoid tendencies towards over-controlled and over-managed amenity landscape. The North Downs landscape is under considerable pressure due to its proximity to densely populated urban areas and many busy roads (including the M2 motorway), although the highest level of designation for landscape protection (Kent Downs AONB National Landscape) ensures that all development proposals are subject to very careful scrutiny.

All three valleys provide incredibly important areas of accessible and semi-natural greenspace in close proximity to densely populated urban communities. The corridors provide significant health and recreational benefits. There are areas of poor health in the heavily urban areas adjacent to Horsted Valley and Princes Park, and these areas form an important green wedge linking urban communities into the wider countryside and the North Downs and connect into the heart of Medway's urban areas. Capstone Country Park itself is an extensive and highly visited site. It offers walking, cycling and mountain biking routes, and visitor facilities. There are areas of wildflower meadows and woodland, support rare wildlife such as the dormouse.

In some places along these corridors these is poor pedestrian and cycle accessibility. Plans for Country Park improvements should seek to be sustainable and multi-functional – offering goods and services (including biodiversity, health, recreation, education, farming, etc.) for the widest possible range of users.

Capstone Country Park

Priorities for this Area

- Manage greenspaces to ensure that they can accommodate high levels of visits, providing infrastructure and maintenance to meet this high demand.
- Where development is taking place, ensure that public rights of way are improved and, where possible, provide multi-user routes and new connections.
- Invest in Capstone Country Park to provide for a wide range of people and recreational interests.
- Manage Medway Council sites to improve biodiversity and access, for example Daisy and Coney Banks.
- Continue to support Kent Wildlife Trust in managing Darland Banks for biodiversity and people.
- Manage Capstone Country Park to fulfil its role as a core biodiversity site in the valley and maximise its potential to mitigate against climate change.
- Link habitats from Capstone Country Park across the valley with, for example, hedgerows and wildlife corridors.
- Protect and buffer the remaining small ancient woodlands.
- Work with neighbouring authorities to strengthen cross-boundary biodiversity corridors at Taddington Valley, into Walderslade Woods and the landscape south of the Capstone valley.
- Work with other landowners, particularly the schools in the central corridor, to strengthen green infrastructure linkages and biodiversity movement corridors, and utilise all types of green space for biodiversity improvements.
- Work with landowners and local planning authorities to establish strong green infrastructure planning and investment in conjunction with development at Lidsing and the Capstone Valley
- Ensure urban public rights of way are more fully utilised, keeping them clear from flytipping, signing them and upgrading for cycling use where possible.
- Develop urban promoted walking trails and link town with countryside through improved routes and public rights of way.
- Update and revise promoted routes using public rights of way in both urban and rural areas, providing more information on accessibility.
- Improve routes which are used by Walking for Health.
- Ensure greenspace includes thoughtful and inclusive physical design, to deliver multiple outcomes to attract different population groups.
- Support meaningful engagement to understand why some communities do not use greenspace, even when it is relatively close, to reveal the complex and diverse ways greenspace is thought about and used.
- Implementation of the Arches Neighbourhood Plan (Chatham)
- The planting of hedgerows, shelter belts and small woods around the fringes of built areas, to reduce their visual intrusion and provide a strong landscape framework into which future development can be absorbed.
- Strengthen and reinforce natural features as accessible green corridors linking built up areas with the wider countryside.
- Strengthen and reinforce landscape structure in urban–rural fringe areas and across the wider countryside. Ensure that the edges of new and existing urban and rural settlements blend comfortably with the surrounding countryside.
- Improve accessibility of cultural heritage sites through sustainable transport links and enhanced interpretation (where appropriate).
- Identify heritage which contributes to the urban fabric and local distinctiveness which can be used to guide future development.

- Identify and protect important viewpoints of heritage assets and ensure that the historic natural environment is respected and interpreted through new development.
- Consideration of design guidelines for the Kent Downs AONB, where appropriate.

Plan 23: Three Valleys – Horsted, Princes Park and Capstone

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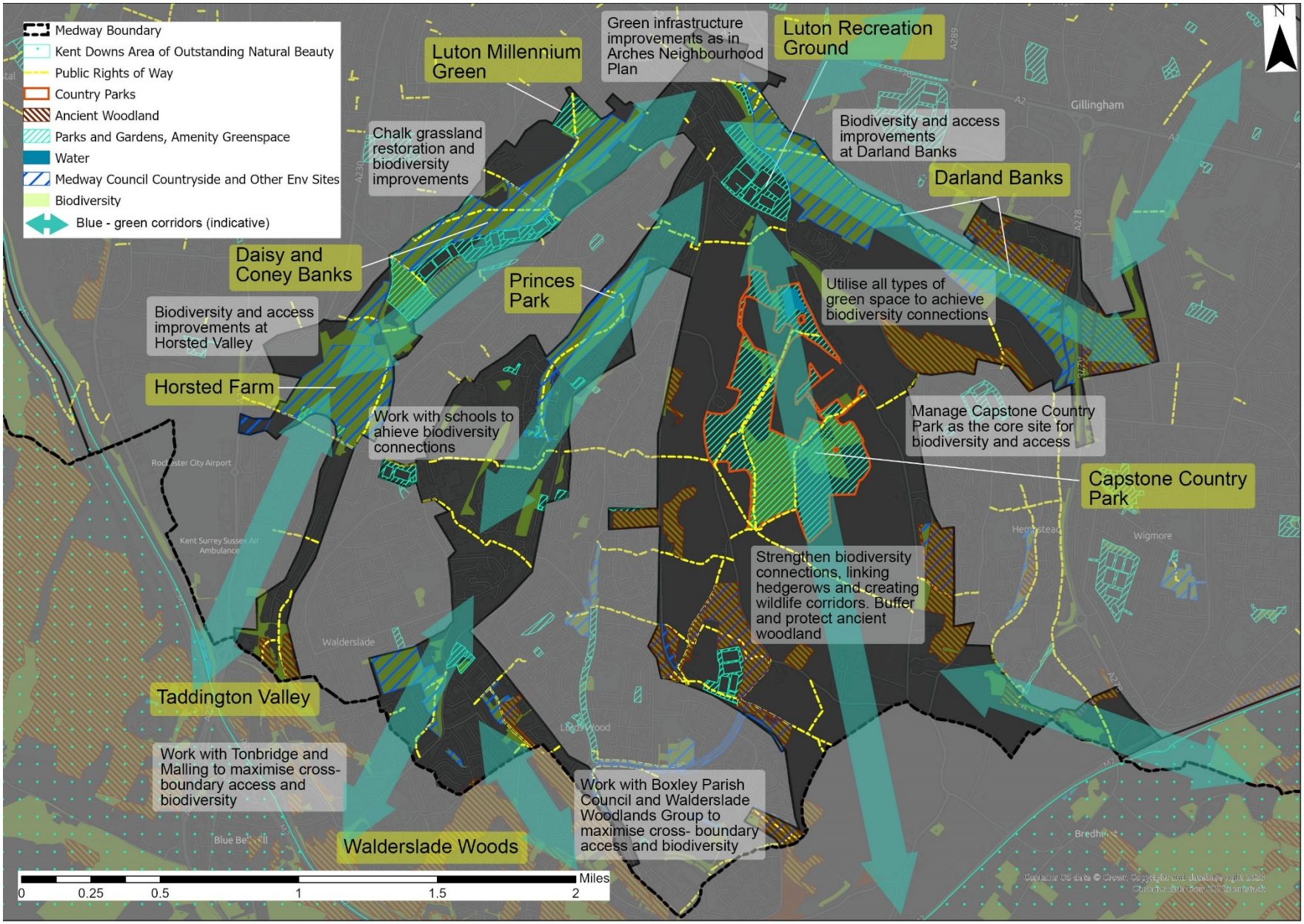
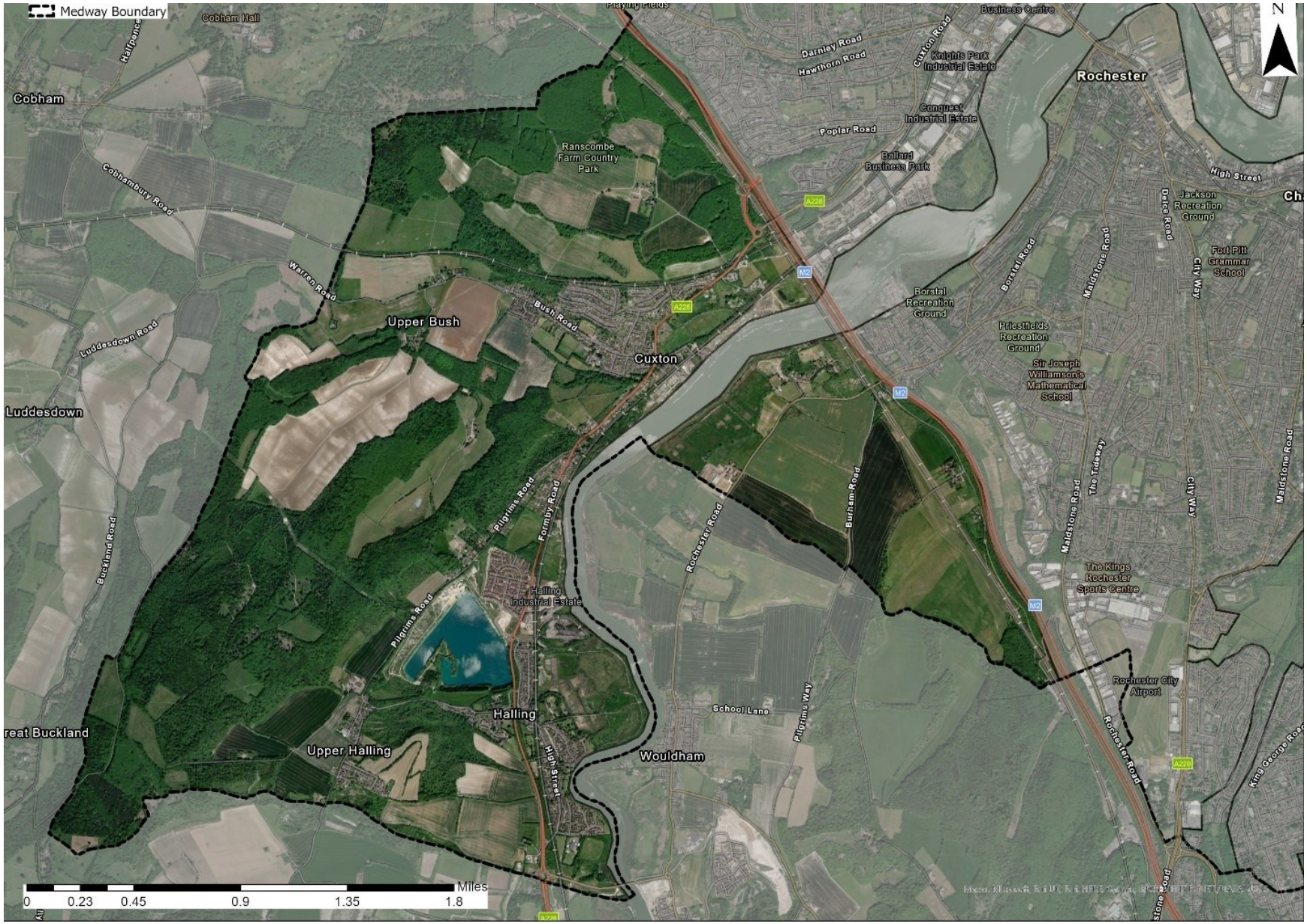


Area 5: Cuxton and Halling



This area is a broad valley formed by the River Medway as it passes through the North Downs. Within this area are the villages of Cuxton, Halling and smaller settlements of Upper Halling and Upper Bush. Most of this area is within the Kent Downs National Landscape Area of Outstanding Natural Beauty and the Metropolitan Green Belt.

The valley sides and the river were once the scene of industry and extensive quarrying. Most of this industry has now left the area, but the evidence remains on the landscape in the form of flooded lakes, including Halling's 'blue lake' (St Andrews Lakes) and glistening white cliff faces from former quarries, now reclaimed by nature. Alongside the river are pockets of marshes and reedbeds.

The area is the most wooded in Medway - 39% of Cuxton and Halling Ward is woodland with large blocks of woodland on the North Downs. Just over two thirds of this is ancient woodland; and 57% of all of Medway's ancient woodland is in this ward.[77] These woodlands extend into neighbouring districts forming important corridors.

On the northern slopes of the Kent Downs above Cuxton lies Ranscombe Farm Reserve. This is one of the best sites for arable plants in Britain, managed since 2005 by the wild plant conservation charity, Plantlife. These include rough poppy, corncockle, nettle-leaved bellflower and many species of orchid. The woodland at Ranscombe Farm is also important, bordering and including part of the ancient and listed Cobham Park[78] and part of the larger Cobham Woods Site of Special Scientific Interest. The Woodland Trust Ancient Tree Inventory records 554 ancient or other important trees in Ranscombe Farm Reserve and Cobham Park.[79]

On the eastern valley side is the Kent Wildlife Trust Reserve of Nashenden Down. This area was formerly arable land, beginning its transformation into a nature reserve in 2009. The site is now boasts new hedgerows, ponds and grassland which supports a wide range of wildlife.

Walking the North Downs Way above Nashenden Valley

Halling and Wouldham lie near the river on the broad valley bottom. The landscape here is open with views to wooded hills. The Halling Marshes are a small area of grazed wet grassland, with pockets of salt marsh, adjoining River Medway.

The North Downs landscape within the Medway area is under considerable pressure on account of its proximity to densely populated urban areas and many busy roads (including the M2 motorway and the A228 linking the M20 and M2),[80] although the highest level of designation for landscape protection (Kent Downs AONB) ensures that all development proposals are subject to very careful scrutiny. The landscape is heavily fragmented by historic land uses associated with chalk extraction industries; includes quarries; railway lines; busy roads; settlements; old wharfs; marinas, mobile homes, industrial areas.

In the Medway Valley there is a threat of landscape fragmentation with loss of rural character and local distinctiveness caused by the intrusion of inappropriate urban fringe activities. Threatened and damaged areas are on western side of river and include Cuxton Scarp Foot, Halling Quarries, Halling and Holborough Marshes. However, the industrial heritage within Medway Valley also forms part of its local distinctiveness.

There is a good network of public rights of way through this area, with several promoted circular routes. The North Downs Way National Trail also follows the top of the North Downs on both sides of the valley, crossing the River Medway across the M2 bridge.

Ranscombe Farm Reserve

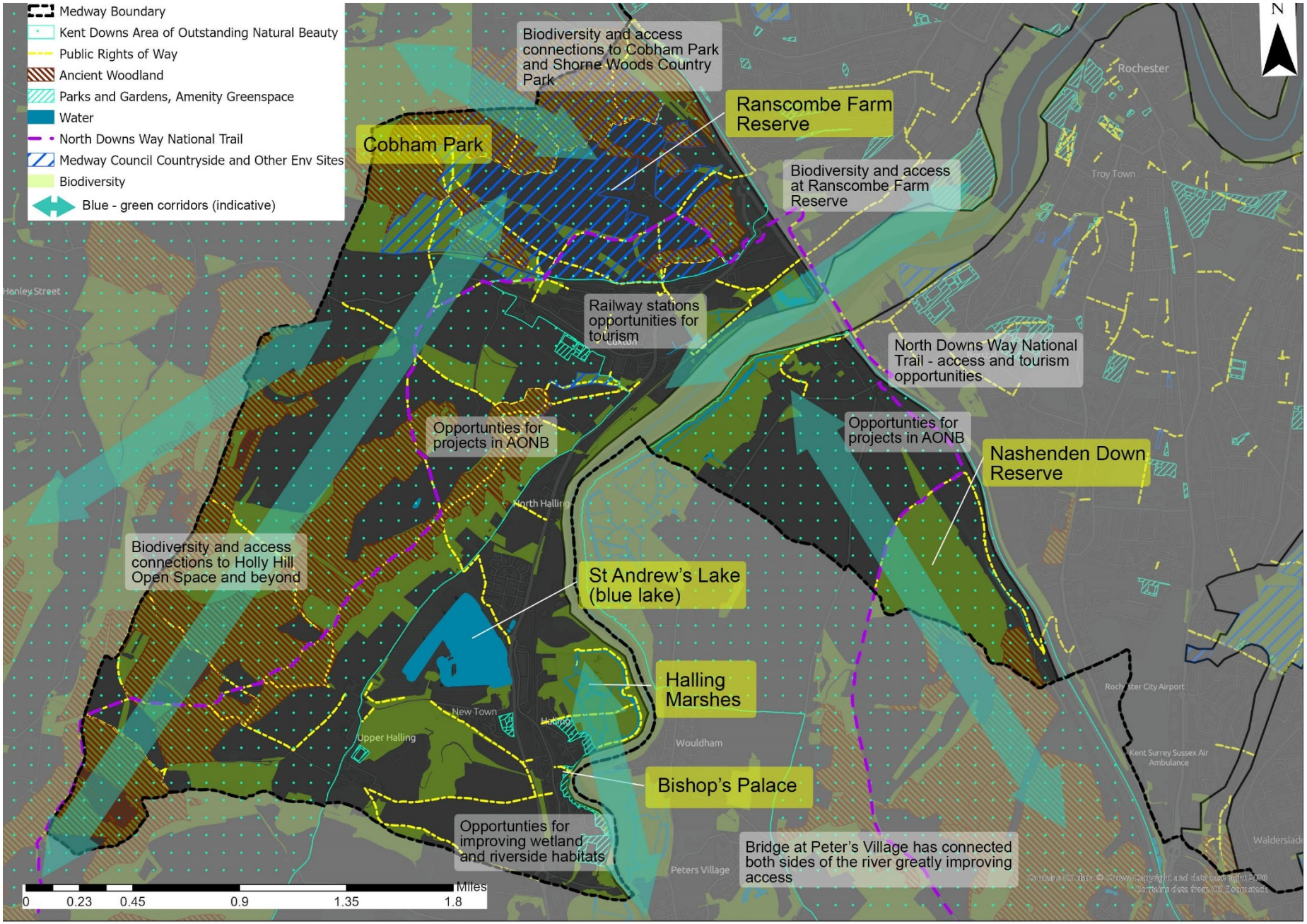
There are few areas of poor health in this area, however its proximity to the dense urban areas of Medway make it a valuable resource for neighbouring communities. The M2 motorway forms a significant barrier although there are public rights of way which link into the valley. These links should be promoted and upgraded to increase accessibility and use for a wide range of users.

Priorities for this Area

- Establish links to this area from Strood across the M2 into Ranscombe Farm Reserve
- Continue to work with Plantlife to maximise opportunities for biodiversity, landscape conservation and quiet informal recreational at Ranscombe Farm Reserve.
- Conservation of wetland features.
- Link town with countryside through improved routes and public rights of way.
- Manage greenspaces to ensure that they can accommodate high levels of visits, providing infrastructure and maintenance to meet high demand.
- Invest in public rights of way, particularly those linking town and countryside, to ensure they are accessible to a wide range of people.
- Ensure urban public rights of way are more fully utilised, keeping them clear from flytipping, signing them and upgrading for cycling use where possible.
- Seek to establish multi use path from Cuxton Railway Station under M2 bridge to Strood.
- Update and revise promoted routes using public rights of way providing more information on accessibility.
- Implement actions in Kent Downs AONB Management Plan and implement design guidance.
- Develop access and tourism projects along the Medway Valley rail line.
- Strengthen access, biodiversity, heritage and landscape links across in and around Cobham Park, Ranscombe Farm and Shorne Woods Country Park, extending along the woodlands to Holly Hill open space, linking across neighbouring authority areas.
- Support the ongoing work of the North Downs Way Partnership and Kent Downs AONB access projects, for example promotion of Green Pilgrimage projects and tourism opportunities.
- Develop cultural projects to celebrate the heritage and natural heritage of the area, and building on the work of the ‘Valley of Visions’ Landscape Partnership Scheme.
- Encourage sustainable woodland management.
- Continue partnership work to deliver ‘Securing the Landscape’ to tackle illegal access.
- Support project which develop the cultural and biodiversity importance of former industrial heritage, for example the former quarries.

Ranscombe Farm Reserve © Plantlife

Plan 24: Cuxton and Halling



Area 6: River Medway

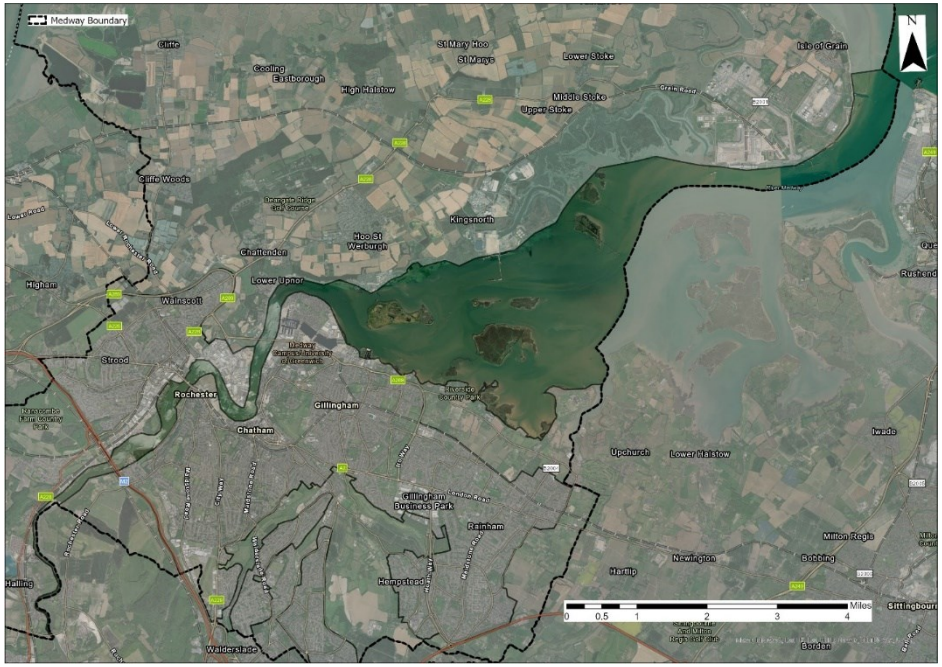
This area describes the River Medway from its point of entry into Medway to the south of Halling to the mouth of the estuary at the Isle of Grain. The river is tidal throughout its length.

The river dominates the setting, form and history of Medway. The river has been the site of defences with forts lining both its banks and located within its estuary on small islands.

The southern part of the river meanders in loose curves past Halling, Wouldham and Cuxton, before passing under the M2 and Channel Tunnel Rail Line bridges. The river gradually broadens as it passes through urban Medway, before expanding into a wide open estuary at Upnor and St Mary's Island.

The River Medway is engrained in the cultural heritage of Medway and have been the lifeblood for settlement in the area for millennia; providing a source of food, raw materials, transport, employment, leisure, artistic inspiration and even as a means of protection from invasion. The river has been the site of defences and industry - commercial shipbuilding in Medway established itself as a major riverside industry in the 16th century after the arrival Royal Navy. In 1871 Hoo Fort and Darnet Fort were constructed on the marshy islands in the River Medway.

Distinctive relics of many of these industries reflect the past and have helped to shape the landscape along the banks of the Medway and more recent industrial activity is reflected on the Hoo Peninsula in Power Stations and Industrial Estates, a Fuel Storage & Distribution Depot and a Container Dock Terminal – all situated along the north bank of the River Medway. Further evidence of this industrial landscape is provided



by overhead power lines; a rail freight line and a road network supporting this industrial activity.

Since the closure of Chatham Dockyard in 1984 many of the associated maritime trades have declined and the wharves closed, leading to a number of riverfront regeneration programmes and a gradual move away from the traditional 'working river' to more leisure-based pursuits.

The riverside is the focus of large-scale and ambitious regeneration, stretching from Temple to Gillingham Quays. There are ambitions to improve access and town centres with links to and alongside the river. The river is also the focus of Medway's Cultural Strategy.

The river is a primary biodiversity corridor. Lining the river there are grazing marshes, reedbeds, mudflats and areas of saltmarsh. The river forms an exceptional and highly project area for biodiversity.

The impact of climate change is leading to wetter winters and short-lived extreme weather events occurring more frequently. Sea levels are also rising and this will have localised effects on the Thames and Medway estuaries and on the reaches of the tidal Medway. Impacts are likely to include flood and coastal erosion, habitat and species loss, crop changes, decline and migration. Steps are needed to enable the natural environment to adapt to these changes. Salt marsh provides valuable flood control and storm buffering benefits. Medway has many valuable salt marsh areas which require protection and enhancement.

Time spent in ‘blue space’ – near water – has also been found to improve mental and physical health. Blue space is abundant in Medway and includes the sea, coastlines, rivers, lakes, and canals. There is some access to the riverside on public rights of way, although this access is not continuous. The Medway Valley Walk promoted route follows the eastern bank of the river to Rochester. Riverside greenspaces include Baty’s Marsh, The Esplanade, The Strand, Riverside Gardens and Gun Wharf and Riverside Country Park.

Some of these riverside habitats and the species which rely on them are vulnerable to recreational pressure. Medway Council is operating a Strategic Access Management and Monitoring strategy (SAMM) through ‘Bird Wise’ to manage recreational pressure on the bird species which rely on the habitats of the Medway estuary.

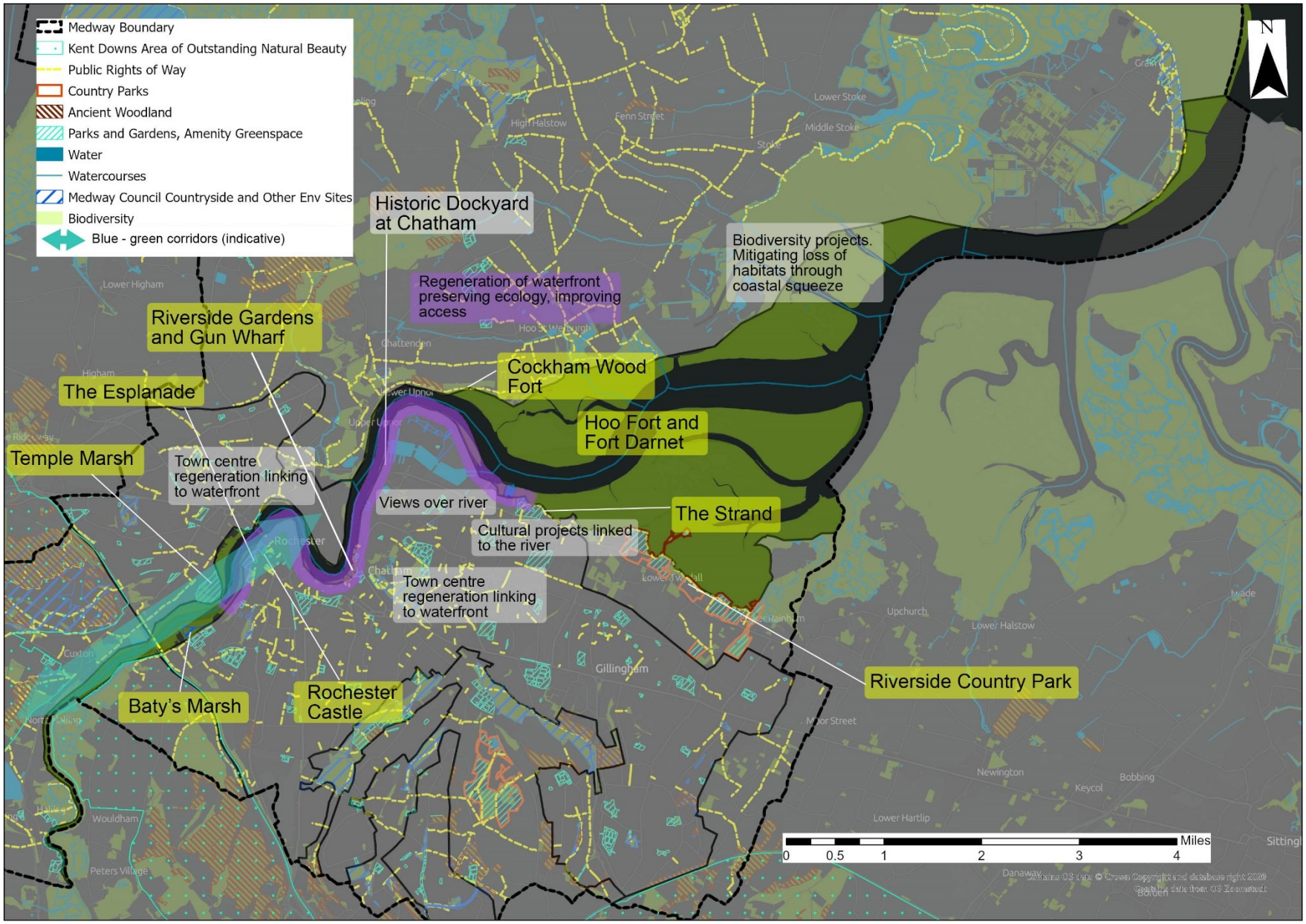
River Medway at Upnor and St Mary’s Island

Priorities for this Area

- Place the river at the heart of Medway's ambitious regeneration programme, sensitively regenerating the waterfront, creating improved access to and along the river and regenerating the town centres and public realm near the river.
- Develop a River Strategy to maximise opportunities for sustainable use of the river for commerce and recreation.
- Establish better access to the waterfront enabling a necklace of open spaces, interlinked with high quality and well promoted routes and rights of way.
- Promote the King Charles III England Coast Path in this area.
- Work in partnership to mitigate against climate change and sea level rise and coastal squeeze on biodiversity habitats.
- Where development is taking place ensure that public rights of way are improved and, where possible, provide multi-user routes and new connections – particularly to the river.
- Implement more riverside cycling routes.
- Protect and enhance high quality landscapes and biodiversity sites along the Thames and Medway estuaries.
- Identify and protect important heritage assets and ensure that the historic natural environment is respected and interpreted and the cultural importance recognised in regeneration projects.
- Protect distinctive and prominent landscape features; including views from the Thames and Medway estuaries.
- Implement the 'Bird Wise' SAMM to protect sensitive biodiversity.
- Promote and develop biodiversity projects along the river, working with the Medway Swale Estuary Partnership.
- Maintain key strategic views over the river.

River Medway at Gillingham, focus for regeneration

Plan 25: River Medway




Part 3: Delivery

Delivery

Delivering this strategy will require partnerships between many organisations and individuals and across many Medway Council teams.

The aims in this strategy are not all within the remit of Medway Council to deliver but are considered important in order to set out an ambition for Medway. They will require funding, which will also entail working with partners, local communities and developers to secure; and new and innovative ways of working. Local communities, schools, universities, community organisations and individuals all have an important role to play in improving green and blue infrastructure.

Green and blue infrastructure is all around us and gardens too can make an important contribution to the health of urban areas, for example through providing habitat for pollinators, through water harvesting or the creation of drought gardens.

To achieve many of the objectives in this strategy requires partnership working, not only between local authorities and organisations, but with local communities as well. Local organisations and individuals are important in deciding how the objectives of this strategy can be taken forward locally, in helping to develop projects and in seeking funding. Local communities may wish to develop projects to green their local school or park, to carry out tree planting, clear out their local watercourse or provide more areas for pollinators - or may have other ideas and priorities to improve their local area. Medway Council already supports many Friends Groups and will continue to support communities in taking steps to improve their green spaces, green infrastructure and biodiversity wherever possible.

Development

Green and blue infrastructure is an essential element in ensuring the delivery of sustainable development, as well as supporting the quality of life and health and wellbeing of residents, economic growth and the future resilience and prosperity of Medway. Medway Council will all development to support the priorities of this Green and Blue Infrastructure Framework.

Development will be expected to contribute to the delivery of this strategy, which could include:

- Wildlife corridors and semi-natural green space
- Enhancement of biodiversity features
- Access corridors for pedestrians and cyclists
- Accessible green space
- Contribution to biodiversity and deliver of biodiversity ‘net gain’
- Provision to ensure ongoing maintenance of green infrastructure
- Tree planting and retention of existing trees and woodland
- Sustainable drainage schemes
- Improvements to watercourses
- Green and blue infrastructure network improvements which link to features beyond the development boundary
- Specific objectives and projects contained in this strategy and the Action Plan

Glossary

Accessible green space: places available for public access, usually free of charge and without time restrictions.

Semi-natural green space: places that include semi-natural habitat, either forming the whole site or an element within a site.

Ancient woodland: an area which has been continuously wooded since at least 1600. These are often the richest woodlands in terms of biodiversity.

Biodiversity: the term used to describe the diverse forms of biological life.

Biodiversity Action Plan (BAP): a strategy prepared for a local area to provide a framework for conserving and enhancing biodiversity, identifying priority species and habitats and setting out the necessary actions to safeguard these.

Biodiversity 'net gain': Development that leaves biodiversity in a better state than before.

Biodiversity offsetting: compensates for any adverse biodiversity impact that remains after appropriate prevention and mitigation measures have been taken in response to development.

Blue corridors: used to describe linear green infrastructure based around watercourses, including streams, rivers or canals.

Catchment management: the coordinated planning and management of a river catchment by a group of stakeholders.

Climate change adaptation and mitigation: the changes that need to take place in an area, or that are naturally taking place, in response to changes in the climate.

Community Infrastructure Levy (CIL): a levy on new development to be set by local planning authorities and used to pay for new infrastructure, such as schools, roads and green infrastructure.

Ecosystem: a system of physical and biological elements which function together as a unit.

Ecosystem services: the wide range of essential services and benefits that are derived from a functioning natural environment, including the management of basic resources such as water, food, fuel, air quality and recreation.

Greenways: traffic-free routes running through green spaces or other areas of green infrastructure, providing safe and attractive routes for walking and cycling.

Green corridor: linear green infrastructure which includes, amongst others, cycleways, rights of way and disused railway lines. They can also support ecological connectivity.

Green infrastructure network: the linking together of areas of green infrastructure to create an interconnected network, providing opportunities for recreation, increasing ecological connectivity and enhancing the landscape.

Landscape-scale: a landscape-scale approach seeks to provide multiple benefits, taking a holistic approach which considers biodiversity alongside other issues such as recreation, economics, agriculture and tourism, looking beyond protected areas and discrete wildlife sites to wider natural processes, functioning across the landscape.

Landscape character: the distinct and recognisable patterns and elements that occur consistently in a particular type of landscape, and how people perceive these.

Multifunctional: the ability to provide more than one benefit or function on a piece of land or across a green infrastructure network.

Natural capital: The world's stocks of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible.

Secondary woodland: a woodland that has grown on land that was previously not woodland, either through planting or establishing naturally.

Section 106 (s106) Agreement: Negotiated contributions towards a range of infrastructure and services as part of a condition of planning consent, such as community facilities, public open space, transport improvements and/or affordable housing.

Sustainable Drainage Systems (SUDS): systems designed to reduce the potential impact of new and existing developments on surface water drainage.

Wildlife corridors: areas of habitat through which species can move to other wildlife areas.

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[1] Paragraph 181 "*Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries*."

[2] Paragraph 96 "*Planning policies and decisions should aim to achieve healthy, inclusive and safe places which: … c) enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.*"

Paragraph 154 "*New development should be planned for in ways that:a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; …*"

Paragraph 186 "*… Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement…*"

[3] Under the Natural Environment and Rural Communities (NERC) Act 2006.

[4] Natural England recommends 1 hectare of Local Nature Reserve per 1,000 population. Medway currently has 0.28 hectares per 1,000 people (population c278k ONS mid year estimate 2018).

[5] Medway has 41% of Kent's littoral sediment, 34% of saltmarsh and 65% of saline lagoons. Much of this area is protected under the Medway Estuary and Marshes Special Protection Area (SPA) and Ramsar and Thames Estuary and Marshes Ramsar and SPA

[6] Designated in 2013 and extended in 2019 to extent of tidal River Medway. Species of note include the scare smelt (fish) which uses the entire river system to migrate to freshwater to breed and tentacled lagoon-worm.

[7] Kent Habitat Survey (2012); 24% of Kent's habitat is in Medway.

[8] Lawton, J.H., *et al* (2010) Making Space for Nature: a review of England's Wildlife Sites and Ecological Network. Report to Defra. Natural England provides more detail on developing 'Nature Networks'. Natural England. (2020). *Nature Networks: Evidence Handbook.* NERR081; *Nature Networks: A Summary for Practitioners.* NERR082.

[9] Sensitive management around sites to help protect them and increase biodiversity.

[10] The Kent Nature Partnership, including Medway Council, is developing a Local Nature Recovery Strategy which will set a new direction for landscape-scale nature conservation in Kent and Medway.

[11] https://www.buglife.org.uk/our-work/b-lines/

[12] Edwards J, Knight M, Taylor S and Crosher I. E. (May 2020). Habitat Networks Maps, User Guidance v.2. Natural England. Priority habitats are mapped in Natural England datasets.

[13] See note 13.

[14] • Sensitivity to Change – classifies each priority habitat type as high, medium or low sensitivity based on scientific literature and expert judgement;

• Habitat Fragmentation – measures how isolated or aggregated 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;

• Topographic Heterogeneity – incorporates variations in height and aspect, as less variation can increase vulnerability;

• Management and Condition – assesses habitat condition based on SSSI condition and negative impacts which are not linked to climate change, as these can increase vulnerability.

[15] Kent Nature Partnership. (2020). Kent Nature Partnership Biodiversity Strategy 2020 to 2045.

[16] Ashley Godfrey Associates. (2012). Medway Council Open Space PPG17 Study.

[17] *Ibid.*

[18] Including The Great Lines Heritage Park and Luton Millennium Green Pocket Park.

[19] 'Access land' designated under the Countryside and Rights of Way Act 2000 is also, usually, semi-natural. There is limited access land in Medway, with the largest site at Halling Marsh. Other sites are small areas in Cliffe and Walderslade.

[20] Medway Wildlife, Countryside and Open Space Strategy 2008-16

[21] Proposed standards from Ashley Godfrey Associates. (2012). Medway Council Open Space PPG17 Study. Sub-areas as set out in this report.

[22] Including country parks.

[23] More information can be found at https://www.medway.gov.uk/cycling

[24] Medway Council. (2020). Medway Rights of Way Improvement Plan.

[25] Bridleways, restricted byways and byways.

[26] Heron, C., & Bradshaw, G. (2010). Walk this Way - Recognising Value in Active Health Prevention. LGiU for Natural England.

[27]Public Health England. (2020). Improving access to greenspace: A new review for 2020. p 12.

[28] Marmot, M. (2010). Fair Society, Healthy Lives (The Marmot Review): Strategic Review of Health Inequalities in England post-2010.

[29] Kent Public Health Observatory. (August 2016). Joint Strategic Needs Assessment Overview Report (Sustainability Chapter). Kent County Council and NHS.

[30] Medway Health and Wellbeing Board. (2024). Joint Health and Wellbeing Strategy for Medway 2024-2028

[31] http://www.medwayjsna.info/index.html.

[32] Ward Profiles https://www.medway.gov.uk/downloads/file/8298/chatham_central_and_brompton_ward_profile_2023_boundaries

[33] In 2018, Public Health England estimated that between 2017 and 2025 the total cost to the NHS and social care system due to the health impacts of PM2.5 and NO2 in England will be £1.69 billion. This figure is for where there is robust evidence for an association between exposure and disease.

[34] Kent County Council – Active Travel Strategy 2018, p5.

[35] https://www.medway.gov.uk/info/200221/a_better_medway/449/health_walks/2

[36] https://www.medway.gov.uk/cycling

[37] 'Peoples Engagement with Nature - Reflecting on ten years of the Natural England MENE survey' is a Storymap produced by Natural England. https://defra.maps.arcgis.com/

[38] Public Health England. (2020). Improving access to greenspace: A new review for 2020. p13.

[39] Papworth Trust. (2018). Facts and Figures 2018 – Disability in the United Kingdom.

[40] Standard advocated by the National Society of Allotment and Leisure Gardeners. Ashley Godfrey Associates. (2012). Medway Council Open Space PPG17 Study.

[41] Kent Habitat Survey (2012).

[42] The River Medway is tidal until Allington Lock on the northern outskirts of Maidstone.

[43] Known as the 'Medway Gap'.

[44] South East Coastal Group. (2010). Medway Estuary and Swale Shoreline Management Plan.

[45] South East Coastal Group. (2010). Isle of Grain to South Foreland Shoreline Management Plan.

[46] The Medway Estuary Marine Conservation Zone is designated for the following habitats:

• Estuarine rocky habitats; • Intertidal mixed sediments;• Intertidal sand and muddy sand; • Low energy intertidal rock; • Peat and clay exposures;• Subtidal coarse sediment;• Subtidal mud; and,• Subtidal sand.

And for the Tentacled lagoon-worm (*Alkmaria romijni*).

[47] Environment Agency, Groundwater Source Protection Zones - http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=531500.0&y=181500.0&topic=groundwater&ep=map&scale=5&location=London,%20City%20of%20London&lang=_e&layerGroups=default&distance=&textonly=off#x=574986&y=167313&lg=1,10,&scale=6

[48] The Lewes Chalk Formation is classified as principal aquifer. The Thanet Sand Formation is a secondary aquifer and London Clay Formation as aquiclude.

[49] Southern Water supply water to most of the authority and South East Water supply Halling.

[50] Kent County Council. (2017). Kent Water for Sustainable Growth Study.

[51] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/764784/English_PFRA_December_2018.pdfhttps://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/764784/English_PFRA_December_2018.pdf

[52] https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index

[53] Medway Council. (2011). Medway Landscape Character Assessment. p12.

[54] Medway Council. (2017). Medway Heritage Asset Review. p3.

[55] As designated by Natural England.

[56] Natural England. (2013). National Character Area Profile 81 Greater Thames Estuary. p3.

[57] Cliffe Pits and Pools and Cliffe to St Mary's Marshes.

[58] Medway Landscape Character Assessment 2011.

[59] Allhallows to Stoke Marshes, Hoo Flats, Riverside Marshes and Motney Hill.

[60] Medway Landscape Character Assessment 2011.

[61] Natural England. (2015). National Character Area Profile 113 North Kent Plain.p3.

[62] Cliffe Farmland, St Mary's Farmland, Cooling Farmland, Northward Hill, Lower Cockham Farm Ridge, Hogmarsh Valley, Bald Top Hill, Tower Hill Stoke Farmland, Cliffe Woods Farmland, Hoo Peninsula Farmland, Chattenden Ridge, Hoo Farmland.

[63] Medway Landscape Character Assessment 2011 p

[64] Lower Rainham Farmland, Moor Street Farmland and Meresborough Farmland.

[65] Medway Landscape Character Assessment 2011 p67

[66] Darland Banks, East Hill, Capstone Farm, Sharstead Farm, Elm Court, Hempstead Fringe and Horsted Valley.

[67] Nashenden Scarp, Nashenden Valley, Wouldham Scarp East, Wouldham Marshes, Cuxton Scarp Foot, Halling Marshes, Holborough Marshes, Halling Quarries, Halling Scarp West, Bush Valley, Dean Farm, Ranscombe Farm and Matts Hill Farmland.

[68] These are documented in the Review of The Kent Compendium of Historic Parks and Gardens for Medway 2013. Research reports have now been put on their website.

[69] National HLC Stage 5 – NE 2017 p

[70] Oxford Archaeological Unit. (2001). Kent Historic Landscape Characterisation. Kent County Council and English Heritage.

[71] The Hoo Peninsula Landscape – Historic England 2015 p 2

[72] The project involved aerial surveys, analytical earthwork and building surveys, historic landscape, seascape and routeway characterisation, archive research, farmstead characterisation, Historic Area Assessments and a palaeoenvironmental review.

[73] Medway Heritage Asset Review 2017 – p61

[74] https://www.medway.gov.uk/downloads/file/4524/chatham_town_centre_masterplan

https://www.medway.gov.uk/downloads/file/4523/strood_town_centre_masterplan

https://www.medway.gov.uk/downloads/file/4525/gillingham_town_centre_masterplan

[75] http://www.archesnp.org.uk/

[76] E.g. ski slope, car parks; waste recycling/landfill site, narrow lanes with heavy 'rat-run' traffic uses and poor-quality equine-related facilities Horsted.

[77] Figures from Medway Tree and Woodland Strategy (unpublished). 67% of woodland in Cuxton and Halling Ward is ancient.

[78] Cobham Hall Grade II Park and Garden. https://historicengland.org.uk/listing/the-list/list-entry/1000182

[79] https://ati.woodlandtrust.org.uk/

[80] Traffic flows may also increase following the construction of the Lower Thames Crossing.