

09 December 2020 at 5.00 pm

This meeting will be held virtually via Zoom,
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https://www.youtube.com/channel/UCIT1f_F5OfvTzxjZk6Zqn6g

Despatched: 01.12.20



Cleaner & Greener Advisory Committee

Membership:

Chairman, Cllr. McArthur; Vice-Chairman, Cllr. Carroll
Cllrs. Andrews, Barnett, Bayley, Dr. Canet, Collins, G. Darrington, Foster, Griffiths,
Nelson and Raikes

Agenda

| | Pages | Contact |
|---|-------------------|---------------------------------------|
| Apologies for Absence | | |
| 1. Minutes To agree the minutes of the meeting of the Committee held on 13 October 2020, as a correct record. | (Pages 1 - 6) | |
| 2. Declarations of Interest Any interests not already registered. | | |
| 3. Actions from Previous Meeting (if any) | | |
| 4. Update from Portfolio Holder | | |
| 5. Referral from Cabinet or the Audit committee (if any) | | |
| 6. New proposed waste collection, transportation and disposal regulations model to reduce incidents of fly-tipping | (Pages 7 - 16) | Trevor Kennett Tel: 01732 227407 |
| 7. Service Update: Licensing | (Pages 17 - 24) | Sharon Bamborough Tel: 01732227325 |
| 8. Kent Nature Partnership Biodiversity Strategy 2020-2045 | (Pages 25 - 96) | Helen French Tel: 01732 227357 |
| 9. Net Zero 2030 update and Kent & Medway Energy and Low Emissions Strategy | (Pages 97 - 134) | Helen French Tel: 01732 227357 |
| 10. Work Plan | (Pages 135 - 136) | |

EXEMPT INFORMATION

At the time of preparing this agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public.

If you wish to obtain further factual information on any of the agenda items listed above, please contact the named officer prior to the day of the meeting.

Should you need this agenda or any of the reports in a different format, or have any other queries concerning this agenda or the meeting please contact Democratic Services on 01732 227000 or democratic.services@sevenoaks.gov.uk.

CLEANER & GREENER ADVISORY COMMITTEE

Minutes of the meeting held on 13 October 2020 commencing at 5.00 pm

Present: Cllr. McArthur (Chairman)

Cllr. Carroll (Vice Chairman)

Cllrs. Andrews, Bayley, Dr. Canet, Collins, G. Darrington, Griffiths and Raikes

Apologies for absence were received from Cllrs. Barnett and Foster

Cllr. Dickins was also present.

24. Minutes

Resolved: That the minutes of the Cleaner & Greener Advisory Committee held on 29 October 2019 be approved and signed by the Chairman as a correct record.

25. Declarations of Interest

Cllr Raikes declared for reasons of transparency that he had been lobbied in respect of minute 34 - Sevenoaks Parking Review and that he was also a Member of Sevenoaks Town Council, who currently had the contract for the town market in relation to minute 35 Budget 2021/22: Review of Service Dashboards and Service Change Impact Assessments.

26. Actions from Previous Meeting

There were none.

27. Update from Portfolio Holder

The Portfolio Holder, and Chairman introduced Trevor Kennett who was the new Head of Direct Services.

During lockdown Officers had been put under additional pressures and taken on different roles to help residents. The Portfolio Holder expressed her thanks to the teams for taking on the extra duties, working long hours and for everyone rising to the challenges before them.

Moving forward, a campaign raising awareness of the hazards of car idling was being created with a project plan and signage banners, particularly aimed at schools that were near air quality management areas. Schools had been written to,

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to see if there was interest in assisting with the project and the wider health benefits. Environmental Health would work with Parking Services regarding a wider educational car idling campaign going forward, and an application for funding from DEFRA had been submitted.

Members were advised that the air quality draft report management was being checked over by the Scientific Officer, and the report would be brought to a future meeting.

28. Referral from Cabinet or the Audit committee

There were none.

29. Net Zero 2030 Update October 2020

The Principal Planning Officer (Planning Policy) introduced the report which updated Members on the ongoing work to achieve Net Zero 2030, following the agreement of Council to achieve net zero greenhouse gas emissions by 2030. A Cabinet Working Group was set up and met in February 2020 and an Officer Working Group was also set up to support the Cabinet Working Group. Members' attention was brought to table 1 in the report which set out the immediate actions and commitments with an update on the progress of those actions. There had also been progress on longer term stage 2 actions, and those which had significant progress were shown in table 2.

The Policy Officer advised that the Local Government Association Innovation Programme brought together councils and universities to develop a practical project to address local net zero challenges. Officers had submitted a proposal that focuses on how to engage rural communities in Net Zero.

In response to questions Members were advised that the current electrical charging policy was from the Allocations and Development Management Plan (ADMP) and the emerging local plan went further for more and improved charging points.

Resolved: That the report be noted.

30. Service Update: Direct Services

The Head of Direct Services presented the report which updated Members on the service delivery from March to September 2020 for Direct Services. He advised that services were continuing to be delivered successfully despite Covid-19 restrictions.

In response to questions Members were advised that the Countryside & Open Spaces team worked closely with the Forestry Commission particularly with identifying Ash dieback. A tree strategy would be brought to Committee in 2021. Members discussed Bradbourne Lakes and were advised that currently the Heritage Lottery Fund had suspended funding for new projects until 2021 and as a result only the day to day management around the lakes could be carried out.

Members expressed their thanks to the teams for their tremendous effort at continuing to provide an excellent service to residents.

Resolved: That the report be noted.

31. Service Update: Car Parking

The Parking Manager presented the report which updated Members on the service delivery from March to September 2020 for Parking Services. Members were informed that following the national lockdown, the Council made all of its public car parks and on-street parking facilities 'free of charge.' Parking enforcement remained in place, particularly around Knole Estate. The Civil Enforcement Officers were also delivering emergency food parcels around the district to those residents who were most in need during lockdown, with the Administration Officers helping to co-ordinate the deliveries.

In response to questions Members were advised that enforcement against cars that park on pavements could only be carried out by the Police. Members were advised that there were roads close to Sevenoaks Town where there was 2 hours free parking available.

Resolved: That the report be noted.

32. Annual Review of Parking Management 2021/22

The Parking Manager presented the report which sought approval for the freeze on all parking charges across the district. In light of the impact that the Covid-19 pandemic has had on parking supply and demand for parking across the district, the proposed freeze would help support local businesses and economies, stabilising services over the next 12 months.

It was suggested that due to the extra capacity in the Bradbourne Car Park, a charge reduction could be considered to encourage commuters to use that particular car park.

Public Sector Equality Duty

Members noted that consideration had been given to impacts under the Public Sector Equality Duty.

Resolved: That it be recommended to Cabinet that:

- a) the parking management proposals for a freeze on all parking charges for 2021/22 be agreed; and
- b) a charge reduction be considered to encourage commuters to use Bradbourne Car Park.

33. Christmas Parking 2020

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The Parking Manager reported that free parking was proposed in Sevenoaks town and Westerham on the two weekends leading up to Christmas in December 2020. Vehicles would still be required to observe a maximum parking time and regular monitoring would take place to ensure this is complied with. The maximum stay in Blighs Car Park on the two weekends would also be reduced from 4 hours to 3 hours.

Public Sector Equality Duty

Members noted that consideration had been given to impacts under the Public Sector Equality Duty.

Resolved: That it be recommended to Cabinet that:

- a) the proposal for free parking in Sevenoaks town and Westerham on Saturday 12 December 2020, Sunday 13 December 2020, Saturday 19 December 2020 and Sunday 20 December 2020 be provided; and
- b) it be recommended to Council that the cost of in terms of loss of income for free parking be met from Supplementary Estimates.

34. Sevenoaks Parking Review

The Parking Manager presented the report which informed Members of the findings of the Sevenoaks parking review carried out between October 2019 and January 2020. The review recommended that where parking issues had been identified, that reasonable and proportionate measures be taken to improve parking management arrangements. The review also recommended that no further action at this stage be taken in locations where feedback indicated that no significant parking issues exist. It was acknowledged that some areas had more complex parking issues which could need further investigation. It was also proposed that new measures to help support low paid local workers and improve the benefits that existing zones provided to residents.

The Parking Manager further advised that there needed to be a balance for resident and non-resident permits and “exclusive” resident only schemes did not fall under Kent County Council’s guidelines. By looking at some of the boundaries for the parking zones this would provide greater flexibility for resident parking. During the construction of Sevenoaks Town Car Park, permit holders were parking in other areas including in underused resident permit zones, due to many of the houses having off-street parking. It was hoped by offering low paid workers a reduced cost permit to park in these areas, (generally at the top of St Botolphs Road) this would support the local economy.

In response to questions, Members were advised that the resident parking schemes were designed to meet an original parking need and that residents in new builds and conversions were not therefore eligible to park in the existing schemes.

Public Sector Equality Duty

Members noted that consideration had been given to impacts under the Public Sector Equality Duty.

Resolved: That it be recommended to Cabinet that:

- a) the ratio of resident and non-resident permits be adjusted to help ensure that parking availability is maximised throughout the day;
 - b) the period of no return in all parking bays in zone A be increased from 1 hour to 4 hours;
 - c) “no return” to all roads in Zone A, until the 4-hour no return period has passed;
 - d) rationalising boundaries and eligibility to maximise convenience and accessibility for residents be reviewed; and
 - e) Non-resident on-street parking permits to low paid workers at a reduced rate, where spare capacity exists, be offered.
35. Budget 2021/22: Review of Service Dashboards and Service Change Impact Assessments (SCIAs)

The Deputy Chief Executive & Chief Officer - Finance & Trading, presented the report which set out updates to the 2021/22 budget within the existing framework of the 10-year budget and savings plan. The report presented growth and savings items that had been identified which needed to be considered, and requested further suggestions from Members, before finalising the budget for 2021/22.

Informed by the latest information from Government and discussions with Cabinet, it was proposed that the Council continued to set a revenue budget that assumed no direct funding from Government through the Revenue Support Grant or New Homes Bonus. This would result in the Council continuing to be financially self-sufficient. To achieve this aim and to ensure a balanced budget position over the next 10-year period would be more challenging this year due to the financial impact of the Covid-19 pandemic.

The budget process would be shorter with the Council’s budget set at the November Council meeting instead of the February Council meeting. This should enable any changes to be implemented before 1 April 2021 and minimise the period of uncertainty for staff.

The annual budget gap included in the report was £826,000 which was largely due to Covid-19. Growth and savings proposals had been identified in the report for this Committee but Members were asked for their suggestions in order to contribute to reducing the budget gap, and their recommendations would be considered by Cabinet as part of the process to set a balanced 10-year budget. By addressing the issues this year, the Council would once again be in a strong financial position that other councils would aspire to.

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In response to questions Members were advised that the commercial income from new services (SCIA 10) would be from 2022/23 and would be where there is already a commercial market, by expanding the current domestic services already provided. Looking to the future for Direct Services, it was hoped that an Apprentice would be employed and there would be more training opportunities for staff to use the current resources more effectively. A report would be brought to a future meeting of the Committee.

Public Sector Equality Duty

Members noted that consideration had been given to impacts under the Public Sector Equality Duty.

Resolved: That it be recommended to Cabinet that the growth and saving proposals identified in Appendices F & G to the report (SCIAs 1 to 10 and 25) applicable to this Advisory Committee, be considered.

36. Work Plan

The work plan was noted with the following additions:

9 December 2020

Kent Biodiversity Strategy
Kent Energy and Low Emissions Strategy
Net Zero 2030 Carbon Emissions Update
Service Update: Environmental Health
Service Update: Licensing

19 January 2021

Air Quality
Net Zero 2030 Carbon Emissions Update

THE MEETING WAS CONCLUDED AT 6.57 PM

CHAIRMAN

NEW PROPOSED WASTE COLLECTION, TRANSPORTATION & DISPOSAL REGULATIONS MODEL TO REDUCE INCIDENTS OF FLY TIPPING

Cleaner & Greener Advisory Committee - 9 December 2020

Report of: Deputy Chief Executive and Chief Officer - Finance & Trading

Status: For Consideration

Also considered by: Cabinet - 10 December 2020

Key Decision: No

Executive Summary: This report updates the Clean & Greener Advisory Committee on a proposed new regulatory model created by Cllr Carroll, Deputy Portfolio Holder for Cleaner & Greener and colleagues. The 'Sevenoaks Model' proposes to lobby for new legislative changes to reduce incidents of fly-tipping, make it easier for residents to see who is licensed to carry waste and make it easier for law enforcement to detect unlicensed carriers.

This report examines a new innovative concept and model following a peer review and looks at how the model would assist existing controls, regulation and legislation.

This report supports the Key Aim of: a green and healthy environment

Portfolio Holder: Cllr. Margot McArthur

Contact Officer: Trevor Kennett, Head of Direct Services Ext. 7407

Adrian Rowbotham, Deputy Chief Executive and Chief Officer - Finance & Trading Ext. 7153

Recommendation to Cleaner & Greener Advisory Committee: That following support for the proposal and a County-wide peer review, Members consider the report and endorse the recommendations to Cabinet below.

Recommendation to Cabinet: That

- a) the principles set out as the 'Sevenoaks Model' in paragraphs 12 to 21 of the report be supported;
- b) the Head of Direct Services be authorised to lobby Government for legislative changes in line with the principles proposed in the 'Sevenoaks Model'.

Reason for recommendation: This new innovative idea and working model needs to be supported by the Council, and then promoted to central Government via officers engaging with the Department for Environment, Food & Rural Affairs (DEFRA) and the districts Members of Parliament.

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Introduction and Background

- 1 Cllr Carroll, Deputy Portfolio Holder, Cleaner & Greener has been working with colleagues on a new working model for the regulation of waste collection, transportation and disposal to tackle the increasing National problem of incidents of fly-tipping.
- 2 Laura Trott MP for Sevenoaks & Swanley and Tom Tugendhat MP for Tonbridge & Malling have indicated their support of this new idea and working model.
- 3 This report examines and sets out the new innovative concept and model and looks at existing controls, regulation and legislation.
- 4 At present the registration of waste carriers, brokers and dealers is regulated by the Environment Agency (EA).
- 5 There are two tiers of carriers:

Lower Tier - only carry waste they produced in the course of carrying out their business unless it is construction or demolition waste, only carry (carrier), arrange (broker) or deal (dealer) in:
 - Animal by-products
 - Waste from mines and quarries
 - Waste from agricultural premises
 - Are a charity or voluntary organisation
A lower tier carrier may also include a waste collection, disposal or regulation authority.
- 6 Upper Tier - If none of the lower tier criteria apply, a person or organisation will be in the upper tier. Key examples are if a business:
 - Transports other people's waste, like a skip company
 - Carries construction and demolition waste
 - Arranges for waste from other businesses' to be transported, recovered or disposed of (broker)
 - Buys or sells waste, or uses an agent to do so (dealer)
- 7 The EA also provides a service for the public to check the registration of a business or vehicle to check to see if they are registered and what they are registered to carry.
- 8 All carriers of waste must be registered with the Environment Agency, have a waste carrier licence which can be verified, provide a waste transfer note for removal of any waste on request (for example: following building or garden work), provide details of the site license where the waste is to be

disposed and be able to provide proof of where it was taken in the form of an official weight ticket, which will identify the disposal site.

- 9 This process places a legal Duty of Care on residents, these regulations affect anyone who produces waste. Duty of care requirements are applicable to all parties, but the legal responsibility remains with the waste producer (householder) until the final disposal has taken place.
- 10 Many residents do not understand their duty of care responsibilities or understand that they need to check a business's registration and or get a copy of a waste transfer note for their waste. Many believe this is all the responsibility of the business they have engaged to clear their waste.
- 11 In December 2018 the Government introduced household waste duty of care fixed penalty notices. The fixed penalty notice (FPN) for breaches of the household waste duty of care provides an alternative to prosecution. It allows an individual to discharge liability for the duty of care offence by payment of a financial penalty.

New National 'Sevenoaks Model'

- 12 The Sevenoaks Model main purpose is to:
 - Reduce incidents of fly-tipping
 - Make it easier for residents to see who is licensed to carry waste
 - Make it easier for law enforcement to detect unlicensed carriers
- 13 The basic principles of the new Sevenoaks Model is for Local Authorities to take a much greater role in regulating waste by licencing individuals and vehicles who are involved in the collection, transportation and disposal of waste, along with providing a certificate of all waste carried, its origin and destination.
- 14 Vehicles - In a similar way as Hackney Carriage and Private Hire vehicles it is clearly important that residents using a business to remove their waste should be confident that the driver and vehicle are registered and safe to do so. The vehicle being used to collect, transport and dispose of their waste should be 'plated'. As exemplified below:



- 15 Individuals - In a similar way that the Security Industry Authority (SIA) operates it would be for the person undertaking licensable waste activity, to be responsible for obtaining a licence to work legally within the waste collection, transportation and disposal industry. They will be breaking the law if they work without a licence and their employer will be breaking the law if they use unlicensed staff.
- 16 A simple online registration and issuing process would ensure that anyone in a vehicle that is collecting, transporting or disposing of waste must have with them their licence. As exemplified below:



- 17 Certification - Similar to the current requirements the carrier of the waste would be required to have with them a Waste License Carriers Certificate (WLCC) at all times to show a manifest of all waste being carried, where the waste originated and where the waste was being transported to for disposal or storage.
- 18 This approach could also be incorporated into the current systems and processes operation by the Environment Agency instead of moving this function to local authorities.
- 19 As another alternative Operator's License ('O') type scheme could be issued to ensure that waste carriers have to register any vehicles they use to carry waste. This would allow the public to easily check whether a vehicle is registered. If the necessary powers were available it would allow

enforcement teams to clamp or remove any unregistered vehicles that are parked up with waste on it.

- 20 A change to the Environmental Protection Act 1990 would ensure that failure to use a registered Waste Licensed Vehicle (WLV) that has a valid Waste Control Plate (WCP) on the vehicle and for the driver of that vehicle not to have on them a valid Waste Licensed Driver's (WLD) valid identification would all be offences under the act.
- 21 The necessary authority to enforce / discharge relevant powers, etc. being delegated to local authorities and police colleagues in the appropriate team(s) would also assist with ensuring regulations are followed.

Law Enforcement

- 22 It has been proven in other regulated industries, such as Hackney Carriage Taxi's and the Security Industry that clearly marked vehicles and licensed individuals create an openness and accountability for customers and regulators. The public are still the main source of information, community intelligence and reporting when it comes to a vehicle or person not adhering to any such regulation.
- 23 This new and innovative Sevenoaks Model builds on that premise for the collection, transportation and disposal of waste. The model will also help the public easily identify and report of necessary those vehicle and persons transporting waste that are not registered.
- 24 The police could benefit from this new model by ensuring that all new Waste Control Plate's (WCP), like vehicle registration plates can be read by Auto Number Plate Recognition (ANPR) systems, which would increase accountability and detection. WCP could also be registered with the Driving Vehicle Licensing Agency (DVLA).
- 25 This would work on ANPR if the vehicles registration mark is linked to the Waste Registration Plate via DVLA as ANPR systems are only designed to read number plates.
- 26 The new model would also assist the police and local authorities in roadside inspections as any vehicle with waste on board without a personal or vehicle licence would be committing an offence. This would also ensure the vehicle is seized and the driver prosecuted quickly for the waste offences.
- 27 Community reporting should be at the heart of any model to tackle fly tipping.

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The Model Peer Review

- 28 It was agreed that the model would be shared with all authorities in Kent, via the Kent Resource Partnership. The model was shared with all Kent authorities on 1 September 2020. Five authorities responded to the consultation. The model has been updated to incorporate all recommendations from the Peer review.
- 29 Kent County Council were generally supportive of the model as a positive example of a way to gain greater control by local authorities of enforcement of fly tipping.
- 30 Ashford Borough Council were very supportive of the model saying it was a brilliant idea and were hopeful it gained the traction needed to progress.
- 31 Gravesham Borough Council were pleased to support a new approach to tackling fly tipping. They support the visibility and traceability measures proposed, but questioned whether licensing should be localised.
- 32 Gravesham Borough Council suggested the following alternative considerations to the model: The Environment Agency could remain the licensing authority and process applications, maintain the public register, etc. and could provide the desired Waste Control Plates and licences to facilitate greater visibility and scope for ensuring compliance and assisting law enforcement with traceability.
- 33 You could Issue an Operator's License ('O') type scheme to ensure that waste carriers have to register any vehicles they use to carry waste. This would allow the public to easily check whether a vehicle is registered. If the necessary powers were available it would allow enforcement teams to clamp or remove any unregistered vehicles that are parked up with waste on it.
- 34 An easier and clearer checking system on a .gov.uk website where a member of the public can easily identify a waste carrier and vehicles registered, akin to the 'Eat Out to Help Out' website. In the same way, a member of the public could input their postcode to find a registered waste carrier registered / operating in their locality.
- 35 The necessary authority to enforce / discharge relevant powers, etc. being delegated to local authorities and police colleagues in the appropriate team(s).
- 36 Dover District Council thought the model was a sensible approach in relation to the identification of licenced waste carriers.

- 37 Kent Police were supportive of any initiative that help reduce offences of fly-tipping and pointed out the following for consideration on the model.
- 38 It should be noted that a high proportion of current fly tipping offences are committed by registered carriers.
- 39 The Environment Agency already holds the responsibility to licence waste carriers. Practitioners' find this current system to be one that can be relied upon and used effectively.
- 40 Supportive of Individuals being registered is an interesting concept and one to be explored.
- 41 Community reporting should be at the heart of any model to tackle fly tipping.
- 42 It may not be possible for the Automatic Number Plate Recognition software to identify and record additional information such as the suggested plate.

Key Implications

Financial

There would be no financial implications for local authorities for the introduction of the new Sevenoaks Model as registration fees and charges would cover all costs, similar to taxi licensing.

Legal Implications and Risk Assessment Statement.

Sevenoaks District Council has statutory duties requiring the authority to provide similar public services. The Sevenoaks Model would require the Government to make legislative changes via secondary legislation and statutory Instruments.

Equality Assessment

The decisions recommended through this paper have a remote or low relevance to the substance of the Equality Act. There is no perceived impact on end users.

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Conclusions

The regulation and control of the collection, transportation and disposal of waste needs to be tightened to ensure compliance with regulations, to be easy for the public to identify and use licensed carriers and for law enforcement to identify any person or vehicle carry waste that is not registered.

The new and innovative 'Sevenoaks Model' could provide an effective, efficient and simple process and system to achieve that goal, which will reduce the opportunities and incidents of fly-tipping and enable the public and law enforcement to easily recognise those who are not licensed.

The model has been further developed and changed following a County-wide agency peer review. If supported by the Council, officer's will communicate this new model to officials at the Department for Environment, food and Rural Affairs and via the District's Members of Parliament.

Appendices

Appendix A - Fly-tipping Model

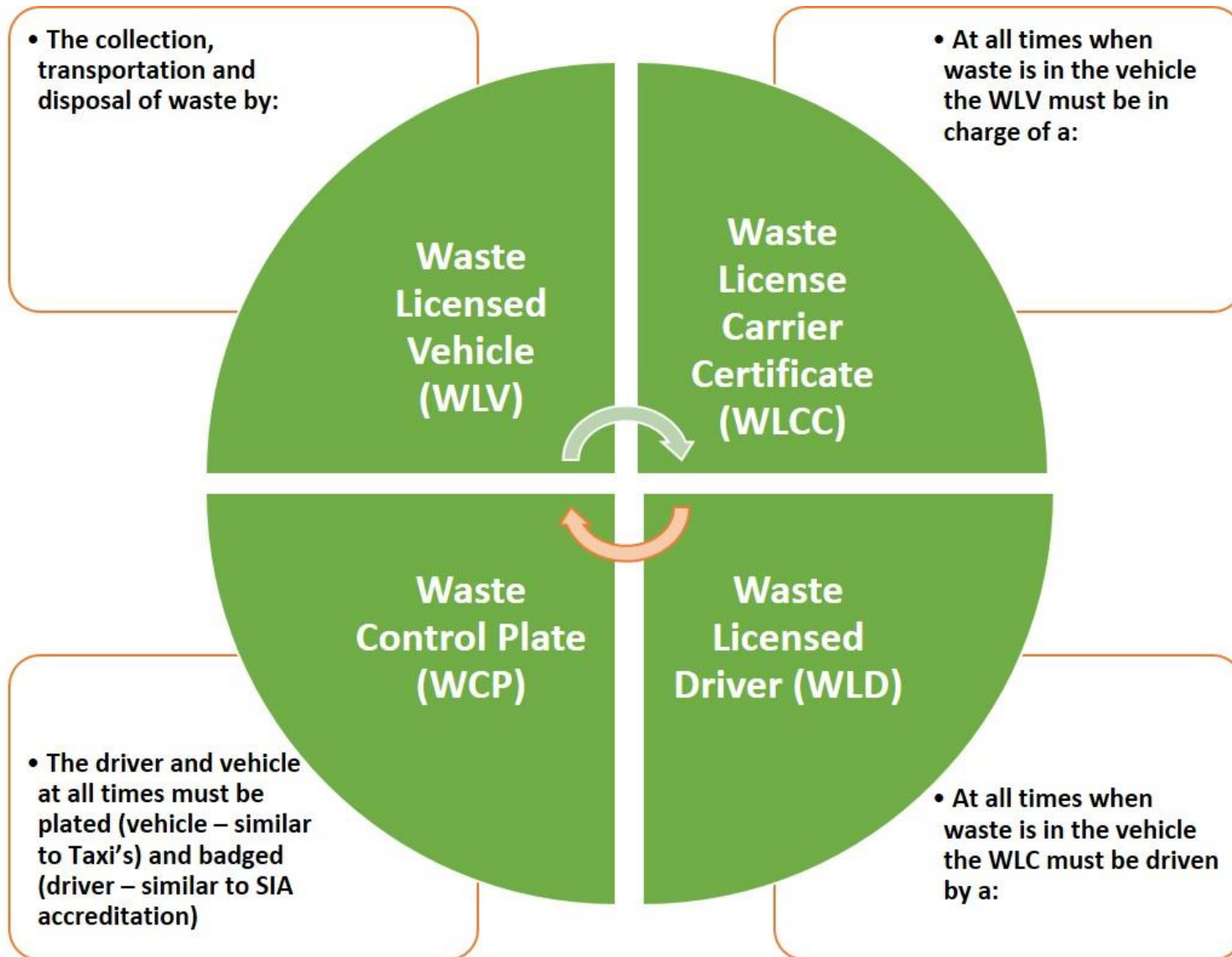
Background Papers

None

Adrian Rowbotham

Deputy Chief Executive and Chief Officer - Finance & Trading

Appendix A - National 'Sevenoaks Model' - New Waste Collection, Transportation and Disposal Regulations to reduce Fly-tipping



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SERVICE UPDATE: LICENSING

Cleaner & Greener Advisory Committee - 9 December 2020

Report of: Deputy Chief Executive and Chief Officer, Planning & Regulatory Services

Status: For information and discussion

Key Decision: No

Executive Summary: This report updates the Cleaner & Greener Advisory Committee about service delivery updates from March to October 2020.

This reports support the Key Aim of: a green and healthy environment

Portfolio Holder: Cllr. Margot McArthur

Contact Officers: Sharon Bamborough, Ext 7325

Richard Morris, Ext. 7139

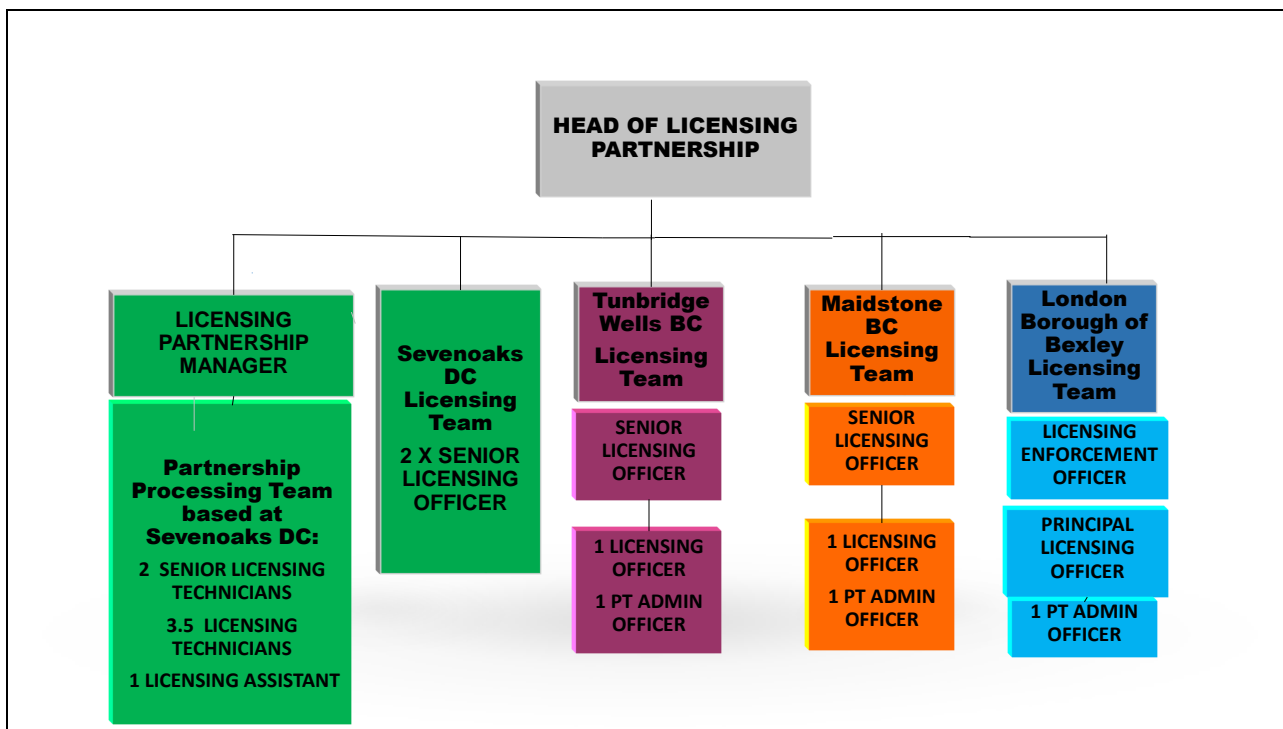
Recommendation to Cleaner and Greener Advisory Committee: To note the update.

Reason for recommendation: This is an information and update report and requires no further actions.

Introduction

- 1 The Council is a member of the Licensing Partnership with Maidstone Borough Council, Tunbridge Wells Borough Council and the London Borough of Bexley which provides line management responsibilities to their respective licensing enforcement teams and an administration team at Sevenoaks to carry out the processing of licence applications, notices, permits and representations.
- 2 The Licensing Partnership has completed 10 years of working together, with London Borough of Bexley becoming a partner as of 31st October 2016.
- 3 This arrangement provides each council with sovereignty over its policies and decision making processes whilst operating within a partnership that gives resilience and capacity to deal with the fluctuating demands on the service through the year.
- 4 This report is a service update on the performance and activity of the Sevenoaks Licensing team and processing team for the Partnership.

Figure 1 below shows the partnership structure.



| | |
|-------------------------|---|
| <p>Key Tasks</p> | <ul style="list-style-type: none"> ❖ Manage and oversee the Licensing Partnership. ❖ Seek to promote the licensing objectives of the relevant legislation. ❖ Our aim is to protect the public but also allow legitimate businesses within the area to prosper. ❖ To ensure that the legitimate taxis and private hire trade are able to provide a safe mode of transport to the residents and users within the Partnership’s area. ❖ Compliance - ensure compliance of licensed premises, activities and events following grant of respective licences, permits and / or notices. ❖ To ensure that unlicensed premises, taxis/private hire and activities are investigated and appropriate action is taken. ❖ To enhance customer service while ensuring compliance with legislation. ❖ Fulfilling statutory duty whilst optimising cost savings and maintaining individual client’s Council sovereignty. ❖ Take advantage of economies of scale to buy services and optimise the collaborative working between partners |
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Challenges for Licensing Service in 2020

- 5 In the current financial year to date, we have experienced unprecedented challenges to the industries we regulate and the way we have needed to work
- 6 Covid-19 resulted in a nationwide lockdown in March 2020.
- 7 Overnight the majority of SDC staff had to work from home. Licensing were in a good position for this transition as the majority of our work comes through electronic means (online applications and correspondence via email) and service delivery was barely affected. The only service we could not provide during full lockdown was the knowledge test for new taxi driver applicants.
- 8 For three months, all hospitality premises and entertainment venues had to shut. In June some were allowed to re-open (pubs, bars & restaurants etc.) but some, even now, remain closed (theatres, nightclubs etc.).
- 9 The national ‘work from home’ guidance, the closing of schools, the lockdown of hospitality and lack of people travelling abroad has had an equally devastating impact on the taxi industry.
- 10 At the time of preparing this report we are in the midst of a second national lockdown.
- 11 Although applications have reduced during this year the **officer teams** have been kept busy with covid-19 related work (enquiries and referrals from Environmental Health) as well as using the time wisely to do other project work such as the new National Standards for Taxis (which required amending the taxi policy) and the legal requirement for our forms to conform with Accessibility requirements, which will benefit the partnership, and the **processing team** have the additional work created by the fee deferral scheme and have used the time review procedures and complete other projects. More information on those areas of work is outlined in the following sections.

Fees and Charges - Assistance to licensees

- 12 At the outset of the first lockdown, the Partnership board discussed and agreed (three of the four partners) to introduce an assistance scheme to help our trade.
- 13 For renewals required during this period, we allowed for a deferred payment scheme whereby renewal applications could be submitted on

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time without the required fee (the applicant was required to sign a declaration agreeing to pay the deferred fee within the required timescale once requested). This assisted the following areas:

- Taxi renewals (drivers, operators and vehicles)
 - Special Treatments renewals (London Borough of Bexley)
 - Animal establishments renewals (London Borough of Bexley)
- 14 For the hospitality industry, they are not required to renew their licences, but instead must pay an annual fee. We continued to invoice to keep on top of the administration but advised (on the invoices) that payment would not be chased nor suspensions done during this period in order to assist them as best we could.
- 15 Before the November Lockdown, we had just started to chase up on the deferred fees and outstanding annual fees. We are mindful of the need to achieve our income as Licensing should be self-financing, but we are unsure what further lockdowns or industry restrictions may continue for the rest of this financial year, and the reality may be that we will not achieve our usual income.

STATUTORY GUIDANCE ISSUED BY THE SECRETARY OF STATE FOR TRANSPORT TO PROTECT CHILDREN AND VULNERABLE INDIVIDUALS

National Standards for taxis

- 16 The Secretary of State for Transport issued new Statutory Guidance to Local Authorities on the exercising of taxi and private hire licensing functions in July 2020.
- 17 There is evidence to support the view that taxis and private hire vehicles are a high-risk environment. In terms of risks to passengers, this can be seen in abuse and exploitation of children and vulnerable adults facilitated and in some cases perpetrated by the trade and the number of sexual crimes reported which involve taxi and private hire vehicle drivers.
- 18 It is expected the recommendations contained within this Guidance be implemented unless there is a compelling local reason not to.
- 19 The Guidance sets out a framework of policies that, under section 177(4), of the Policing and Crime Act 2017, licensing authorities **must have regard** to when exercising their functions. These functions include developing, implementing and reviewing their taxi and private hire licensing regimes. ‘Having regard’ is more than having a cursory glance at a document before arriving at a preconceived conclusion.
- 20 ‘Having regard’ to these standards requires public authorities, in formulating a policy, to give considerations and weight which is

proportionate in the circumstances. **Given that the standards have been set directly to address the safeguarding of the public and the potential impact of failings in this area the importance of thoroughly considering these standards cannot be overstated.** It is not a question of box ticking; the standards must be considered rigorously and with an open mind.

- 21 The three partners who have taxi licensing are all at a similar stage of amending their taxi policies to incorporate the new standards, on track for early 2021 in line with the SoS's suggested timeframe for implementation. We are well ahead of many authorities throughout the country on this.
- 22 Part of the new standards will be an enhanced element of safeguarding training for and new and existing drivers. Currently there is a video which (only) new applicants must watch as part of the knowledge test but we have sourced a software package which delivers the higher standard required). This will be introduced from April 2021.

Pavement Licensing

- 23 In July 2020 it was announced that a temporary piece of legislation (The Business and Planning Act 2020) would be brought in to help the hospitality industry use their outside space through a fast track scheme to be administered at local authority level (the existing system for licensing of street furniture on the highway was done by Kent County Council, but this moved the responsibly, on a temporary basis, over to district and borough Councils where a two tier local government system existed). It also required that applications must be submitted online.
- 24 The new legislation came into effect on 18th July having only been agreed the day before by Government, and this presented a challenge to quickly be able to accept online applications. Having watched the progress of this proposed legislation closely and prepared as much as possible in advance of the go live date, which included drafting a policy, application forms and establishing a processing procedure across three of the four partners (our London partner is a unitary authority and their street licensing sits within another service area and remained with them to implement), Licensing was able to accept applications from 18th July.
- 25 Despite the hope of Government that this would be a great thing for the hospitality industry to mitigate the effects of not being able to accommodate the usual volumes of customers inside a premises due to social distancing requirements, the scheme has not been particularly popular and take up has been small. This is mostly due to there simply not being enough space on pavements to accommodate tables and chairs and leave enough space pedestrians.

Companies House Project

Agenda Item 7

- 26 In the summer of 2020 we used our resources to carry out a long-desired plan of the Head of Licensing to register our interests against every premises licence holder which is a company so that we can receive alerts about any major changes to the company status, such as change of head office address, and more importantly, if the company goes into administration / is struck off. This has been done for all four partners covering approx. 1500 licences.
- 27 The reason this was a useful piece of work to do is that the licence holders often don't tell the licensing authority if they are in administration etc. We have set up to receive alerts on any company who is licensee of any type of licence we cover under the Partnership.
- 28 For the vast majority, this will most impact our work on premises licences under the Licensing Act 2003 (pubs, restaurants etc.). They don't need to apply to renew their licences, they must simply pay an annual fee which we ask for by invoice. If a company goes into liquidation/administration etc., under the Licensing Act 2003, it automatically lapses the licence. Because we are often not told about companies going into liquidation we continue to invoice, only to find out much later down the line after lots of chasing and a site visit, to find the company no longer trading.
- 29 On finding out so much later after the event, we often then need to cancel the invoice and write off the debt, all of which creates a lot of work over the partnership. By being told at an early stage about a change in company status, this will allow us to save time on not raising invoices on lapsed licences or chasing money, and will hopefully give us an opportunity to collect any outstanding fees at a time when the company may still be trading.
- 30 In anticipation of what might happen to the hospitality industry as a result of the pandemic, we are in an excellent position to be much more on top of changing circumstances with our licensees which will lead to efficiency savings in the future for the processing team and officers throughout the partnership.

Emergency Food Distribution

- 31 From May through to the end of July 2020 the Head of Licensing (in addition to the day to day role) oversaw the emergency food box distribution for SDC in helping to support vulnerable residents during lockdown, distributing food and prescriptions 7 days a week, 7 am to 7pm.

Re-Opening the High Street

- 32 Since July 2020 Licensing have contributed ideas and information to meetings organised to discuss safe re-opening of the high street to offer what support we could. We particularly enjoy opportunities to work across the organisation like this for a common goal.

Communication with our licence holders

- 33 Since the first national lockdown in March 2020 and the varying rapid changes in regulations and guidance introduced since, we have tried to keep our licence holders informed about those changes and have carried our several mailshots to our trade (both premises and taxi) advising them on latest changes in legislation or guidance and pointed them towards the government websites where they could find out more.

Special Enforcement Arrangements in Lockdown

- 34 Lockdown saw challenges for our licensing teams in their usual enforcement activities. They moved over to a predominant 'work from home' approach but they have resumed their site visits and taxi checks. They especially visit any premises referrals from Environmental Health following Covid-19 issues/warnings.
- 35 They ensure any relevant information on licensed premises is supplied to Environmental Health upon request in relation to any Covid-19 enforcement investigations

Key Implications

Financial

There are no financial implications identified within this update report.

Legal Implications and Risk Assessment Statement.

No legal implications.

Equality Assessment

No decisions are being made within this report, so there is low relevance to the substance of the Equality Act. There is no perceived impact on end users.

Conclusions

The Licensing team & Processing Team have:

- shown flexibility and an ability to respond quickly to the changing circumstances through what has been a challenging 7 months,
- Responded to changing demands for licensing in the district, and changes in applications resulting from the Covid-19 lockdown.

Agenda Item 7

- Provided assistance to the emergency response service helping vulnerable residents and
- adapted quickly to new legislation, Government guidance, and frequently changing Covid regs

Appendices

None

Background Papers

None

Richard Morris

Deputy Chief Executive and Chief Officer - Planning & Regulatory Services

KENT NATURE PARTNERSHIP BIODIVERSITY STRATEGY 2020-2045

Cleaner and Greener Advisory Committee - 9 December 2020

Report of: Deputy Chief Executive and Chief Officer - Planning & Regulatory Services

Status: For Decision

Also considered by: Cabinet - 10 December 2020

Key Decision: Yes

This reports support the Key Aim of the Council Plan with regard to the Environment.

Portfolio Holder: Cllr. Margot McArthur

Contact Officer: Helen French, Ext. 7357;

Recommendation to Cleaner and Greener Advisory Committee:

To recommend to Cabinet to endorse the Kent Nature Partnership Biodiversity Strategy.

Recommendation to Cabinet:

To endorse the Kent Nature Partnership Biodiversity Strategy.

Reason for recommendation: The Kent Nature Partnership Biodiversity strategy supports the Government ambitions and aspirations set out in the 25 year Environment Plan, “A Green Future”.

Introduction and Background

- 1 The Kent Nature Partnership Biodiversity Strategy sets out the contribution the County of Kent, and the Kent Nature Partnership (KNP), can make to the Government’s ambitions to leave the environment in a better state than we found it and the aspirations set out in its 25 year Environment Plan, “A Green Future”.
- 2 The Strategy has been produced under the guidance of a Task and Finish Group, comprising the following members of the Kent Nature Partnership:
 - Environment Agency
 - University of Greenwich
 - Kent Wildlife Trust
 - Kent & Medway NHS & Social Care Partnership Trust

Agenda Item 8

- Kent County Council
 - Kent & Medway Biological Records Centre
 - LEADER
 - RSPB
 - Natural England
 - Local Authority Representatives
- 3 The Biodiversity Strategy was subject to public consultation June - September 2019 and the final version was published in February 2020.
- 4 Cabinet is asked to endorse the Biodiversity Strategy.

Summary of the Strategy (from the KNP website)

- 5 “The Kent Biodiversity Strategy aims to deliver, over a 25 year period, the maintenance, restoration and creation of habitats that are thriving with wildlife and plants and ensure that the county’s terrestrial, freshwater, intertidal and marine environments regain and retain good health.
- 6 The Strategy looks to protect and recover threatened species and enhance the wildlife habitats that Kent is particularly important for. It also aims to provide a natural environment that inspires citizen engagement and is well used and appreciated, so that the mental and physical health benefits of such a connection can be realised by the people of Kent.
- 7 This will be achieved through the delivery of the following goals in Kent for 2045:
- A rich and growing terrestrial biodiversity, underpinned by more resilient and coherent ecological networks and healthy, well-functioning ecosystems.
 - Clean, plentiful and biologically diverse freshwater and intertidal ecosystems underpinned by implementation of a catchment based approach.
 - A reverse in the loss of marine biodiversity and delivering clean, productive and biologically diverse oceans and seas through good management.
 - The widest possible range of ages and backgrounds will be benefiting from the mental and physical health benefits of the natural environment; and we will have inspired the next generation to take on guardianship of the county’s biodiversity.
- 8 Action will be steered by a broad spectrum of ambitious objectives. The Strategy has identified 17 priority habitats and 13 priority species that Kent can play a significant part in [restoring]. It has also identified a handful of

species that can act as indicators of the health of our ecosystems. In addition, the Strategy looks to further work addressing overarching considerations affecting biodiversity recovery, including wilding, climate change, natural solutions, soil health and invasive species.

- 9 Whilst the Strategy has a 25-year timeframe, its delivery will be planned on a five-year basis with regular review to ensure it continues to respond to environmental pressures and national policy drivers. It is intended that the targets will be owned by all those that have the opportunity to drive the action needed to realise the Strategy's vision - the success of the Strategy will depend on the county's collective action.
- 10 At a time of ecological crisis, the Kent Biodiversity Strategy aims to help steer the collaborative work of conservationists, government, business and individuals to work in partnership so that the county's natural landscape can be restored and threatened species can be saved."

Implications for Sevenoaks District

- 11 We work with partners including the North West Kent Countryside Partnership, Kent Wildlife Trust, Environment Agency and AONB Units to develop and deliver projects to support the ecological and biodiversity value of the District and Kent. It is expected that this joint working will continue.
- 12 The Sevenoaks Greensands HLF project is referenced in the strategy as an example of delivering improvements to a priority habitat.
- 13 The Council's local planning policies support the Biodiversity Strategy. Local Policy sets out local areas of importance for biodiversity that will be protected from any development which may cause a loss in biodiversity value, habitats and/or result in damage to the ecological network.
- 14 Future policies will also be drafted to fulfil the Government's aim for biodiversity net gain from new development in accordance with the Environment Bill.

Next Steps

- 15 The Kent Nature Partnership are drafting Local Authority specific summary documents and an implementation plan to aid local authorities to engage with the strategy aims and objectives.
- 16 We will continue to work with the Kent Nature Partnership to deliver biodiversity improvements and we will support appropriate projects that meet the targets and objectives of the strategy.
- 17 We will ensure the Biodiversity Strategy is considered and referenced in relevant SDC policies and projects including Development Plan Policies and the Net Zero 2030 work where relevant.

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Other Options Considered and/or Rejected

None

Key Implications

Financial

There are no key financial implications to the council in endorsing this strategy.

Legal Implications and Risk Assessment Statement.

The Kent Biodiversity strategy supports the Government ambitions and aspirations set out in the 25 year Environment Plan, “A Green Future”.

Equality Assessment

The decisions recommended through this paper have a remote or low relevance to the substance of the Equality Act. There is no perceived impact on end users.

Conclusions

The Kent Biodiversity Strategy sets out the contribution the County of Kent, and the Kent Nature Partnership, can make to the Government’s ambitions to leave the environment in a better state than we found it and the aspirations set out in its 25 year Environment Plan, “A Green Future”.

Appendices

Appendix A - Kent Nature Partnership Biodiversity Strategy 2020-2045 (February 2020)

Background Papers

The Government’s 25 year Environment Plan - A Green Future

<https://www.gov.uk/government/publications/25-year-environment-plan>

Richard Morris

Deputy Chief Executive and Chief Officer - Planning and Regulatory Services

KENT NATURE PARTNERSHIP BIODIVERSITY STRATEGY 2020 TO 2045

Page 29



The Kent Biodiversity Strategy sets out the contribution the county of Kent, and the Kent Nature Partnership, can make to the Government's ambition to leave our environment in a better state than we found it and the aspirations set out in its 25 Year Environment Plan "A Green Future".

February 2020

Appendix A



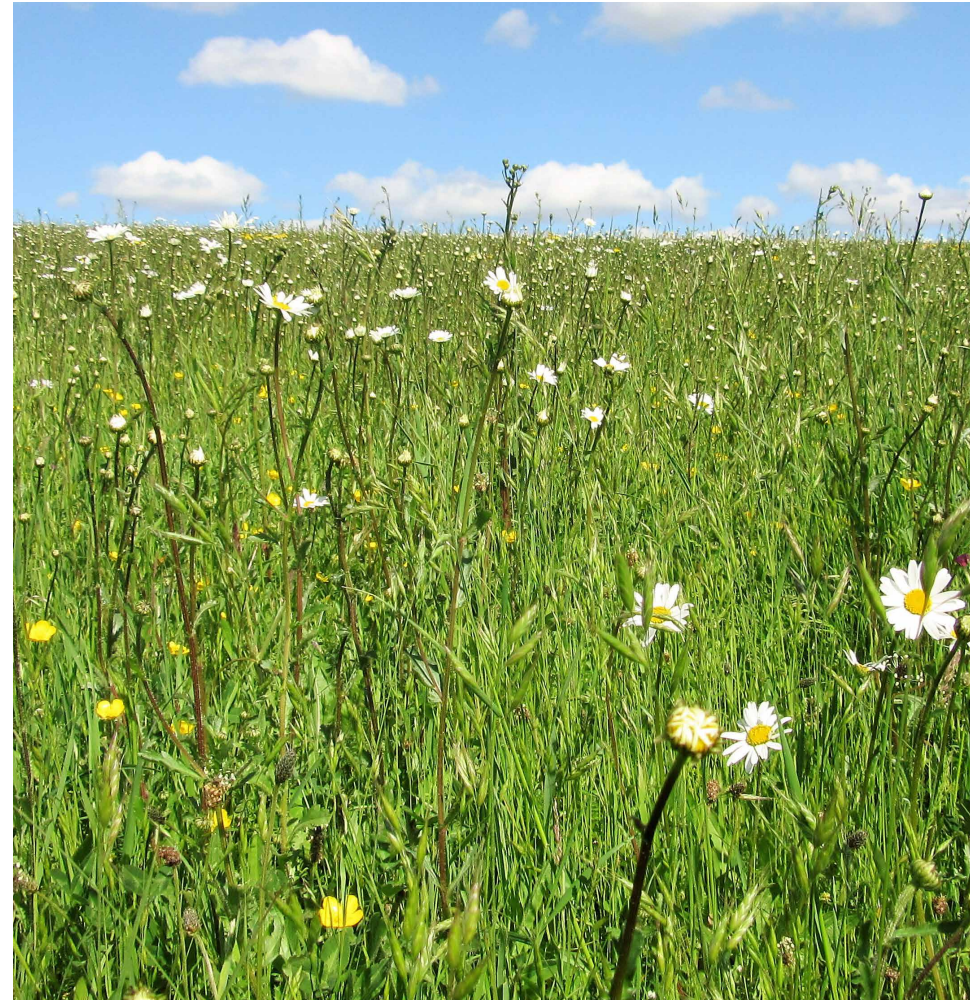
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The Kent Biodiversity Strategy has been prepared under the guidance of a Task and Finish Group, comprising the following members of the Kent Nature Partnership:

| | |
|--------------------------|--|
| Jason Adams | <i>Environment Agency</i> |
| Debbie Bartlett | <i>University of Greenwich</i> |
| Camilla Blackburn | <i>Kent Wildlife Trust</i> |
| Sirina Blankson | <i>Kent & Medway NHS & Social Care Partnership Trust</i> |
| Lucy Breeze | <i>Kent Environment Strategy – Kent County Council</i> |
| Bryony Chapman | <i>Kent Wildlife Trust (KWT)</i> |
| Hannah Cook | <i>Kent & Medway Biological Records Centre (KMBRC)</i> |
| Paul Hadaway | <i>Kent Wildlife Trust</i> |
| Huw Jarvis | <i>LEADER</i> |
| Alan Johnson | <i>RSPB</i> |
| Elizabeth Milne | <i>Kent County Council</i> |
| Laura Newland | <i>Natural England</i> |
| Lyn Newton | <i>Swale Borough Council</i> |
| Mark Pritchard | <i>Medway Valley Countryside Partnership</i> |
| David Scully | <i>Tunbridge Wells Borough Council</i> |
| Ruth Tyson | <i>Kent County Council</i> |
| Anne Waite | <i>Kent Wildlife Trust</i> |



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FOREWORD

In the same year Kent compiled its renewed Strategy for Biodiversity, the UN published the startling and troubling statistic that globally one million animal and plant species are now threatened with extinction. This landmark report has found that nature is declining at unprecedented rates and that this decline will have grave impacts worldwide as we destroy the very foundation of economies, livelihoods, food, health and quality of life. Nature is clearly at a crisis point and we must act now if we are to halt and reverse this trend.

Clearly, tackling such a crisis requires action on a global scale. It requires our government, and governments worldwide, to transform how nature is valued and realise the importance of the health and preservation of biodiversity. But action is also needed locally within the county and we need to restore and create thriving habitats, ensuring the natural environment of Kent and Medway regains and retains good health.

The importance of nature, and the essential role it plays in our lives, is often overlooked. It provides a plethora of services vital to our very existence – the air we breathe, the water we drink and the food we eat. It provides us with raw materials; and a place for leisure, recreation and reflection. So we must take action – not just for nature’s sake but for our own.

Kent is blessed with a wonderfully rich and varied biodiversity. We have globally rare habitats – the stark beauty of the vegetated shingle at Dungeness, the iconic ancient chalk grasslands of the Kent Downs and the dazzling marine

chalk reef around our coast. And our Garden of England supports some equally rare and wonderful species, such as the Lizard Orchid and Shril Carder Bee. But it’s not just the rare or endangered that matter – all our biodiversity, even the most commonplace, has an important role in the natural environment and the services it provides.

The Government’s 25 Year Environment Plan, A Green Future, pledges to use and manage land sustainably; to recover nature and enhance the landscape; to secure clean and biodiverse seas; and connect people with the environment to improve health and wellbeing.

This Strategy translates these policies to the local level and sets out how the county will deliver healthy, sustainable and coherent biodiversity in Kent. It looks to protect and recover threatened species and enhance the wildlife habitats that Kent is particularly important for. It also aims to provide a natural environment that inspires citizen engagement and is well used and appreciated, so that the mental and physical health benefits of such a connection can be realised by the people of Kent.

As leaders of Kent and Medway we recognise we’re at a critical time to take the ambitious steps needed to secure our natural environment for generations to come. We hope this Strategy, and the actions that flow from it, will see the county recognised as a champion for the natural world so we can fully play our part in transforming biodiversity’s fate and reversing its decline.



Roger Gough,
Leader of Kent County Council



Alan Jarrett,
Leader of Medway Council

EXECUTIVE SUMMARY

The Kent Biodiversity Strategy aims to deliver, over a 25- year period, the maintenance, restoration and creation of habitats that are thriving with wildlife and plants and ensure that the county’s terrestrial, freshwater, intertidal and marine environments regain and retain good health.

The Strategy looks to protect and recover threatened species and enhance the wildlife habitats that Kent is particularly important for. It also aims to provide a natural environment that inspires citizen engagement and is well used and appreciated, so that the mental and physical health benefits of such a connection can be realised by the people of Kent

This will be achieved through the delivery of the following goals in Kent for 2045:

- A rich and growing terrestrial biodiversity, underpinned by more resilient and coherent ecological networks and healthy, well-functioning ecosystems.
- Clean, plentiful and biologically diverse freshwater and intertidal ecosystems underpinned by implementation of a catchment- based approach.
- A reverse in the loss of marine biodiversity and delivering clean, productive and biologically diverse oceans and seas through good management.
- The widest possible range of ages and backgrounds will be benefiting from the mental and physical health benefits of the natural environment; and we will have inspired the next generation to take on
- guardianship of the county’s biodiversity.

Action will be steered by a broad spectrum of ambitious objectives.

The Strategy has identified 17 priority habitats and 13 priority species that Kent can play a significant part in the restoration of. It has also identified a handful of species that can act as indicators of the health of our ecosystems.

In addition, the Strategy looks to further work addressing overarching considerations affecting biodiversity recovery, including wilding, climate change, natural solutions, soil health and invasive species.

Whilst the Strategy has a 25-year timeframe, its delivery will be planned on a five-year basis with regular review to ensure it continues to respond to environmental pressures and national policy drivers. It is intended that the targets will be owned by all those that have the opportunity to drive the action needed to realise the Strategy’s vision – the success of the Strategy will depend on the county’s collective action.

At a time of ecological crisis, the Kent Biodiversity Strategy aims to help steer the collaborative work of conservationists, government, business and individuals to work in partnership so that the county’s natural landscape can be restored and threatened species can be saved.



SOME OF THE STRATEGY'S OBJECTIVES FOR THE NEXT 25 YEARS



An ecological network of semi-natural habitat (high and low value) covering 30% of Kent (112,000 ha).



A series of Marine Protected Areas forming an ecologically coherent network that is effective in conserving marine habitats.

There is more, and better quality, accessible natural space and green infrastructure close to where people live and work, particularly in urban areas, where both people and wildlife can thrive; and all new developments will include accessible green space.

20.84% high value semi-natural habitat (74,750 ha), well managed for nature.



Kent's Marine Protected Areas will be improved and extended so that representative habitats missing from the network are featured and offered protection as required.

More people are spending more time in natural spaces and benefiting their mental health and wellbeing.



Improve 375 km (15 km per year) of waters in Kent (rivers, lakes, canals, groundwater, transitional and coastal waters).

More, bigger and less fragmented areas of wildlife-rich habitat outside the protected sites network for wildlife, with an increase in the overall extent of all priority habitats to ensure greater connectivity and resilience to climate change.

An ecological network of semi-natural habitat (high and low value) covering 30% of Kent (112,000 ha).

Restore rivers, and the natural processes that support them, through a catchment-based approach, by ensuring soils are in good condition and well managed, wetland habitats are restored and protected, and headwaters are able to support natural flows and wildlife.



Kent-specific threatened and iconic animals and plants are recovering, including those that support ecosystem services.

KENT BIODIVERSITY STRATEGY PRIORITY HABITATS



Lowland Beech and Yew Woodland

Distinctive habitat for Kent which will be vulnerable to climate changes predicted for the south east.



Lowland Mixed Broadleaved Woodland

A hugely biodiverse habitat which has been lost to clear-fell and plantation planting.

Hedgerows

Provides food and shelter for many species and act as essential corridors along which wildlife can travel.

Lowland meadow

Small, flower-rich fields supporting a plethora of wildflowers and insects.



Lowland dry acid grassland/ Lowland heathland

One of the rarest and most threatened habitats in the county.

Brownfield

Supports an extremely rich diversity of wildflowers and animals, including nationally scarce invertebrates



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Ponds

Important wildlife habitats that support a variety of wetland plants and animals.



Traditional orchard

Once common across Kent, over 60% of traditional orchards have been lost since the 1960s.

Wet woodland

A rare and unique habitat that can play an important role in flood risk management.

Intertidal chalk and subtidal chalk (nominated)

The Thanet coast has the second largest unbroken stretch of chalk reef in the UK.

Rivers

Over 6500 ha of rivers in Kent.

Intertidal mudflats and coastal saltmarsh

Internationally important habitats for wintering and passage birds and breeding waders.



Coastal and floodplain grazing marsh

Increasingly rare habitat is an important home for wading birds.

Chalk grassland

Kent supports around 5% of the UK's chalk grassland habitat.

Vegetated shingle

The cusplate foreland at Dungeness is the UK's largest site of exposed shingle.



Subtidal mud (nominated)






The subtidal mud across Hythe Bay harbours a rare and very rich community of burrowing spoonworms, large shrimps and other animals.

Chalk streams

A globally rare habitat – the majority of the world's unique chalk streams are found in England.

Agenda Item 8

KENT BIODIVERSITY STRATEGY PRIORITY AND INDICATOR SPECIES

| | | | | | |
|--|---|---|--|---|--|
|  | <p>Shrill carder bee</p> <p>Kent is a national stronghold for one of the UK's rarest bumblebees.</p> |  | <p>Turtle dove</p> <p>The UK's fastest declining bird species.</p> | <p>Swift</p> <p>57% decrease in their breeding numbers in the UK between 1995 and 2016.</p> | <p>Nightingale</p> <p>Kent is the UK's stronghold for this declining species.</p> |
| <p>Water vole</p> <p>Britain's fastest declining mammal.</p> | <p>Dwarf or Kentish Milkwort</p> <p>A critically endangered plant.</p> | <p>Adder</p> <p>Suggested decline of 39% of adder distribution in Kent since 1980's.</p> | <p>European eel</p> <p>Stock is at a historical low and continues to decline.</p> | <p>Adonis blue</p> <p>Kent is home to 14% of the national population.</p> |  |
| <p>Heath fritillary</p> <p>Restricted to only four locations in the UK, including a discrete population in the Blean.</p> |  | <p>True Fox-sedge</p> <p>A rare plant whose Low Weald populations in Kent are of national significance.</p> | <p>Lady orchid</p> <p>A highly sensitive indicator of well-managed coppice woodland on chalk.</p> |  | <p>Serotine bat</p> <p>A widespread but declining bat species that provides a means of monitoring population trends.</p> |
| <p>Sandwich tern</p> <p>The Medway Estuary colony is regionally important but threatened by disturbance and sea level rise.</p> | <p>Lapwing</p> <p>Between 1995 and 2012, breeding lapwing declined by 47% in South East England.</p> | <p>Common blue</p> <p>A widespread butterfly that is a good indicator of the health of the wider countryside and flower-rich habitats.</p> |  | <p>Hedgehog</p> <p>In dramatic decline, with at least a quarter of the population lost in the last decade.</p> | <p>Harbour and Grey seals</p> <p>A helpful indicator of general and wider estuarine health including habitat and prey availability.</p> |

INTRODUCTION

THE IMPORTANCE OF NATURE

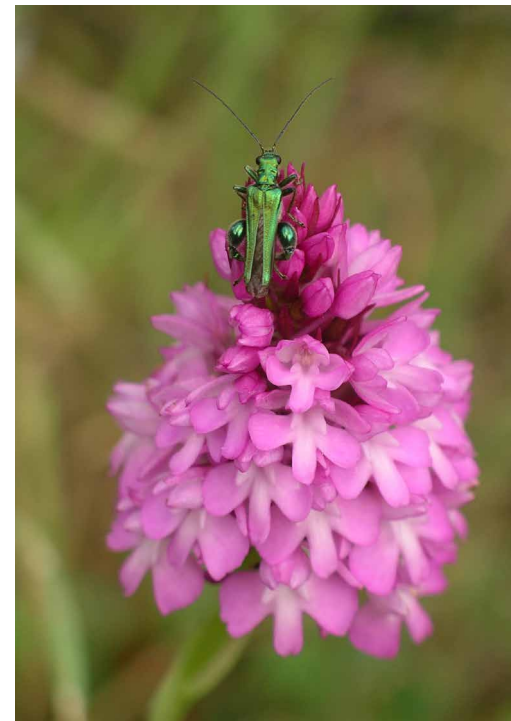
Nature is remarkable and is essential to our lives. It is responsible for the air we breathe, the water we drink, the soil we live on (and off) and the food we eat. It provides us with clothes to wear, materials to build with and medicines to cure. It provides us with a place for leisure, recreation and reflection and provides great joy and interest; as such it is inextricably linked to our mental health and wellbeing.

Despite this, nature is facing a crisis – an ecological emergency. The Living Planet Report (2018) shows that wildlife populations have declined by over half in less than 50 years and that the variety of life on earth is disappearing fast¹. Furthermore the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) reports that globally one million animal and plant species are now threatened with extinction². Nationally, the 2019 State of Nature Report³ found that 13 percent of England's species are under threat of extinction, with 35 percent having declined in number since 1970. Across the UK, 133 species have already been lost. We must act now if we are to turn around nature's fortunes – for nature's sake and for the essential role it plays in our lives.

What is biodiversity?

Biodiversity is the variety of life on Earth, in all its forms, and the interactions between them – it is the wide range of living things and the habitats they rely on. Biodiversity does not just concern rare or endangered species and habitats – everything, even the most commonplace, has an important role in the wider ecosystem and the processes they support. The abundance of a species is also crucial in maintaining a healthy ecosystem.

Kent has a wonderfully rich and varied biodiversity resource, with globally rare habitats such as the vegetated shingle of Dungeness, our ancient chalk grasslands and the marine chalk reef habitats around our Kent coast. Our wealth of varied habitat supports over 3,400 rare and threatened species, with some of these nationally rare and special species only found in Kent within the UK. The north Kent coast is one of the few remaining UK strongholds for the Shril Carder Bee; and Kent is the only place in the south east where the Heath Fritillary is found. The specialist leafhopper *Anoscopus duffieldii* at Dungeness and the late spider-orchid on the chalk downland in East Kent are also unique to the county.



Because of the services and functions that biodiversity provides, this resource can also be described as our natural capital. Natural capital provides (food, raw material and growth), regulates (air, water, soil and climate) and supports us culturally with non-material benefits. It can be simply be described as the elements of nature that directly or indirectly produce value to people. Biodiversity is the “live” element of natural capital and many of the benefits that stem from natural capital are as a result of the interactions between biodiversity and non-living resources. By investing in these biodiversity assets, we are investing in our own future and wellbeing.

KENT'S BIODIVERSE ENVIRONMENT⁴

OVER
3,400

RARE AND
THREATENED
SPECIES

HAVE BEEN
RECORDED IN THE
COUNTY

Page 38

5% OF THE UK'S AND
20% (1,658 HA) OF
THE SOUTH EAST'S
CHALK GRASSLAND
(the UK is thought to hold half
the world's chalk grassland).

ALMOST A THIRD
(27%)
OF THE COUNTY IS
SEMI-NATURAL
HABITAT



THE LARGEST UK
POPULATION OF
LIZARD ORCHIDS
AT SANDWICH BAY



5 OF UK'S 7 RAREST
BUMBLEBEE SPECIES

present in Kent,
making it the most
important county in
the UK for bumblebee
species diversity.



154 ROADSIDE NATURE RESERVES,
WITH A COMBINED LENGTH OF 89KM

466

LOCAL WILDLIFE
SITES, COVERING 7%
OF THE COUNTY

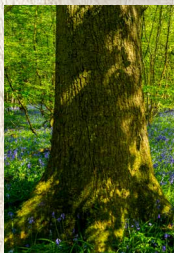
OVER
20,000

SPECIES
HAVE BEEN
RECORDED IN
KENT;
NEARLY 30%
OF ALL
UK SPECIES

35%
OF THE UK'S COASTAL CHALK;
THANET ALONE HOLDS 12%
OF EUROPE'S EXPOSED
COASTAL CHALK⁶

22.5%

OF THE SOUTH EAST'S
ANCIENT
WOODLAND
RESOURCE⁷



11%

OF ENGLAND'S
ANCIENT
SEMI-NATURAL
WOODLAND



ONLY PLACE IN
THE UK WHERE THE
BLACK-VEINED
MOTH IS FOUND

36 BIODIVERSITY ACTION
PLAN PRIORITY HABITATS

387
S41⁵
PRIORITY
SPECIES

SPECIAL
INTEREST

98 SITES OF SPECIAL
SCIENTIFIC INTEREST,
COVERING 8.7% OF THE COUNTY

6

DESIGNATED AND
3 RECOMMENDED MARINE
CONSERVATION ZONES
TOTTALLING OVER 700 KM2



ONLY 200 CHALK RIVERS ARE
KNOWN GLOBALLY, 85% OF WHICH ARE
FOUND IN THE UK IN SOUTHERN AND
EASTERN ENGLAND.

22 internationally designated sites, comprising
15 Special Areas of Conservation,
7 Special Protection Areas and
6 Ramsar Sites.



2 AREAS OF OUTSTANDING
NATURAL BEAUTY: THE HIGH
WEALD AND KENT DOWNS

Kent has one of the largest remaining
populations of Nightingales, with
an estimated 1,500 singing
males. The county is also
an important stronghold for
the Turtle Dove, which is the
UK's fastest declining bird
species and threatened with
extinction on a global scale.



40%

OF THE UK'S COASTAL VEGETATED
SHINGLE AT DUNGENESS



16% OF ENGLAND'S SALINE LAGOONS

NATURAL CAPITAL⁸

The Natural Capital Committee describes natural capital as “The sum of our ecosystems, species, freshwater, lands, soils, minerals, our air and our seas ... These are all elements of nature that either directly or indirectly bring value to people and the country at large. They do this in many ways but chiefly by providing us with food, clean air and water, wildlife, energy, wood, recreation and protection from hazards.”

In 2016, living within 500 metres of green and blue space was estimated to be worth £78 billion to UK homes, adding on average £2,800 to property prices in urban areas.

40%
OF GLOBAL GDP RELIES ON NATURAL CAPITAL.

84%
of European crops depend on wild insect pollination; the value of pollination to UK agriculture is **£440m** per year

Annual visits by UK residents to the countryside and/or villages contribute **£5.5 BILLION;** and to the coast contribute **£7.4 BILLION.**



Around **15M TONNES OF CARBON DIOXIDE** was sequestered by forestry in 2006 and reduced the UK's carbon dioxide emissions by 3%. Carbon sequestration from UK woodland is estimated to be £680m p/a.

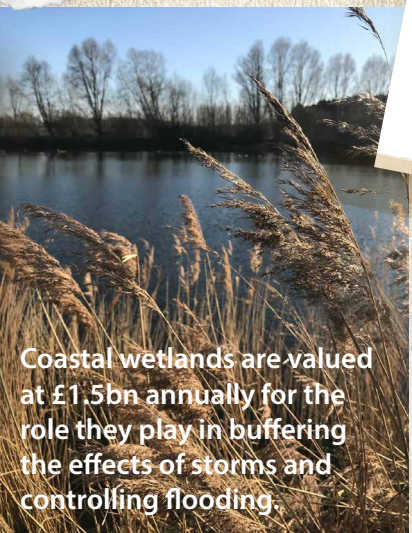
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PROXIMITY TO OPEN SPACE CAN ENHANCE THE VALUE OF COMMERCIAL PROPERTY BY 3% AND HOUSING BY **18%**

URBAN GREEN SPACES CAN HAVE A COOLING EFFECT OF **1-2°C**

People with easy access to nature are 3 times more likely to participate in physical activity, resulting in 40% less likely to become overweight or obese.

TOURISM CONTRIBUTES £2.5bn to the Kent economy and Kent's attractive countryside is a key motivator for people choosing to visit.



Having a view of greenspace increases emotional wellbeing by **5%** and general health by **2%**

90% of people reported an increase in self-esteem after an outdoor walk versus 17% indoors.

In 2016, with the addition of new services, the partial asset value of UK natural capital was estimated to be nearing **£1 trillion (£958 billion).**

In 2017, around 11 billions hours were spent in the natural environment and valued at a substantial **£8 billion.**

Agenda Item 8

A COLLABORATIVE APPROACH TO MEETING THE CHALLENGES

There are pressures on land use which are specific to Kent's location, such as its proximity to London and as a gateway to Europe, through road, rail, sea and air links. But the biggest pressure Kent faces is the significant and unprecedented levels of growth. The Kent and Medway Growth and Infrastructure Framework identifies some 178,600 additional homes and 396,300 additional people by 2031 (that's 24% and 23% growth respectively). And in addition to this is the infrastructure needed to support this – transport, education, health and social care, utilities and community facilities. This all requires space (land) and resources. The Kent Habitat Survey 2012 showed that land covered by development in Kent had increased from 10.7% in 1961 to 17.3% in 2008, an increase of around 62% of the original resource. With unprecedented growth levels predicted, land take will increase even further. And a growing population needs food and materials, with intensive food production and farming placing further pressures on the land. But the natural environment need not always be a barrier to growth; in fact, through its natural capital, biodiversity is integral to growth.

In addition to these pressures on land use, there are some general trends which, historically, have had a negative effect on the natural diversity of Kent. Some of these factors have included:

- Intensification of land management, such as use of chemical fertilisers and pesticides in farming, ploughing up of semi-natural grasslands, loss of traditional orchards.
- Direct loss of habitats through increased development, urbanisation and over-tidying, and other land uses.
- Degradation of soil health and productivity, resulting from nutrient depletion, declines in levels of humus, and erosion and compaction of soils.
- A wide range of pollutants, from many sources, threaten wildlife and have an impact on all habitats, 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 appropriate management, such as the loss of woodland management as the woodland resources become uneconomic to extract; or recreational overuse of sensitive areas.



- Habitat fragmentation – species movement or migration is impaired and populations can become isolated, making them less able to survive or adapt to changing climate conditions.
- Invasive non-native species, which can out-compete native species, and pests and diseases, which can have impacts beyond the species they directly attack.
- Climate change – loss of land through sea-level rise, changes in temperature, weather and other environmental factors altering habitat composition and species movement and survival (Kent is a gateway for species colonising from Europe in a response to climate change).
- Lack of investment and a drop in public sector expenditure on biodiversity, which in the UK, as a proportion of GDP, has fallen by 42% since a peak in 2008/9⁹.

Some of these challenges are beyond the influence of this Strategy and we also need to work within the confines of national government policy and direction. Our ambitions may also be tempered by resources.

Regardless, it is imperative that, at a time of immense change, we all work together to meet the demands of the county whilst safeguarding the future of our wildlife and habitats. Whilst the State of Nature report may paint a bleak picture, it has also shown that when conservationists, government, business and individuals work in partnership landscapes can be restored and threatened species can be saved. This Strategy aims to help steer this collective action.

STRATEGIC CONTEXT FOR THE KENT BIODIVERSITY STRATEGY

The national picture

The changing landscape of environmental politics and policy

At the time of writing, environmental policy, and the wider political context in which it is being developed, is very dynamic. The Government's 25 Year Environment Plan gives us some idea of the ambition and direction of travel but the mechanisms by which this will be delivered are still in development. And this development is taking place in a climate of uncertainty as a result of Brexit. Particular areas of development that will affect the delivery of this Strategy and the targets it sets, include:

- The Environment Bill
- The Agriculture Bill
- Environmental Land Management System
- Biodiversity Net Gain
- Environmental Net Gain
- Nature Recovery Network
- Local Nature Recovery Strategies
- Local Natural Capital Plans
- Glover review of National Parks and Areas of Outstanding Natural Beauty

As such, the Kent Biodiversity Strategy will need to be able to respond and adapt to each of these accordingly as more detail, policy and legislation is formalised.

The Government's 25 Year Environment Plan, A Green Future (2018), pledges that this will be the first generation to leave the environment in a better state than we found it, and pass on to the next generation a natural environment protected and enhanced for the future. The Kent Nature Partnership supports this vision and through the Kent Biodiversity Strategy sets out the county's contribution to this by delivering healthy, sustainable and coherent biodiversity in Kent. As such, the targets set by this Strategy are set within the context of the national 25-year goals and the policies that will deliver them.



The 25 Year Environment Plan looks beyond no net loss and sets ambitious goals for environmental net gain; this is further backed by policy within the 2018 revised National Planning Policy Framework (NPPF). The operational details and resources required to deliver this ambition are not yet clear but in January 2020 the Government published the Environment Bill, which legislated for a mandatory biodiversity net gain within development. In line with these goals, the Kent Biodiversity Strategy assumes maintenance of the extent of our current priority habitat resource and focusses on restoration and creation. As such it intends to provide a framework for the delivery of biodiversity net gain, providing a focus for habitats and species of local importance and priority and, as required by the NPPF and the Environment Bill's Local Nature Recovery Strategies, helps to identify areas for habitat management, enhancement, restoration and creation.

The natural capital approach, whereby consideration is given to the socio-economic value of the natural environment through the ecosystem services it provides, runs through the 25 Year Environment Plan. As the Plan's ambitions are implemented through legislation and policy, it is expected that this approach should underpin all reforms, in particular those within the Agriculture and Environment Bills and the new Environmental Land Management System, to ensure that the natural environment, and the services it provides, are optimised. Safeguarding the future of the county's biodiversity is a critical element of realising the maximum benefits of Kent's natural capital.

The rate of economic development and the associated pressures this places on the natural environment are conditioned by a wide range of national and international factors, a number of which are outside the control of local, or even central, government. As a result of Brexit, the UK is in a period of uncertainty

and potentially far-reaching changes with its largest trading partner. Particularly affected by this is the land management and agriculture sector, as all major policy for this sector is currently European Union-based and the UK replacement for these policies, nor their funding, is not yet fully clear. The environmental impacts of Brexit could be strongly positive or negative depending on future policy decisions. And as such, the delivery of a county-level Biodiversity Strategy is therefore strongly contingent on favourable outcomes to these current uncertainties.

The Kent picture

The Kent Biodiversity Strategy has been developed by the Kent Nature Partnership with the intention that the targets will over time be adopted and incorporated into relevant local policy and plans. The Kent Nature Partnership has a vision *for the Garden of England to have a healthy natural environment that is rich in wildlife, is enjoyed and valued by all and underpins our long-term economic, social and personal wellbeing*. Thriving biodiversity is key to achieving this vision.

In its strategic priorities, the Partnership recognises the need to improve the quality, extent and connectivity of our high value habitats and aims to deliver a network of good quality and high value natural and semi-natural habitats, made up of locally and nationally recognised sites, that is well managed and connected. This Strategy is the means by which this outcome, and more, will be achieved.

Because of the many functions that biodiversity provides, this Strategy must be considered alongside others; not least of all the Kent Environment Strategy. The Biodiversity Strategy provides the detail and focus needed to achieve the natural environment aspirations of the Kent Environment Strategy, in particular to *conserve and enhance the quality and supply of the county of Kent's natural and historical resources and assets*.

The 25 Year Environment Plan sets out that Local Natural Capital Plans (LNCP) will be developed to link the Plan's goals with local priorities. This Strategy will be pivotal in setting out the priorities for Kent's biodiversity within the wider strategic area of the LNCP. Likewise the Kent Biodiversity Strategy should provide a guiding framework for the delivery of biodiversity net gain, the Local Nature Recovery Strategy and Nature Recovery Networks within the county.

There are many other strategies and work programmes that the Kent Biodiversity Strategy should be cognisant of; these are listed in Appendix 4.

HOW WE HAVE CHOSEN OUR PRIORITY HABITATS AND SPECIES

Kent is home to 36 priority habitats¹⁰ (see Appendix 2 for complete list) and 387 priority species¹¹ (see Appendix 3 for complete list). Whilst all remain important to the county, the Strategy has chosen to select 17 priority habitats and 13 species on which efforts should be specifically focussed and targets set. The criteria for their selection are noted in the box below.



The targets for these selected priority habitats and species are based on those set by the Kent Nature Partnership in 2014 and represent targets to be achieved from 2014 to 2025, unless otherwise indicated.

Certain individual species or species groups can provide a useful mechanism for monitoring environmental change, providing warning signs of shifts in the health of our ecosystems and providing opportunities for the general public to effect positive change at a local level. The Strategy has selected a handful of such species as indicators. Similarly, where a species is considered to be undergoing significant decline or pressures but where there is no formal monitoring or targets cannot be easily defined, indicators have been identified for these species.

Kent priority habitat selection criteria

- Habitats for which Kent is a stronghold at UK level.
- Habitats for which there is sufficient data available relating to extent and quality of current resource.
- Opportunity for the KNP to deliver gains for this target through joint working.

Kent priority species selection criteria

- Species that can act as an indicator for the broader health of the natural environment and biodiversity.
- Species for which Kent is a stronghold.
- Species that would benefit from particular attention in Kent.
- Species which will benefit from landscape scale conservation and recovery.
- Species for which data/monitoring is obtainable so targets can be measured.

IMPLEMENTATION, MEASURING PROGRESS AND REVIEW

Whilst this Strategy, and its goals, has a 25-year timeframe some of the targets will have a shorter timeframe in line with aspirations to deliver in the short to medium term. In light of the current changing landscape of environmental legislation and policy, the Strategy will initially be reviewed within two to three years (as appropriate). The Strategy will then be reviewed every five years (unless other external factors dictate earlier is required).

Given the long timeframe of the Strategy and the ambitious nature of the goals, a five-year implementation plan will sit alongside it with delivery of the targets broken down into smaller, shorter actions that will progress us towards the 25-year vision. Monitoring of the Strategy's progress, based on delivery of the implementation plan, will be every two to three years.

Delivery of this Strategy is done within a framework of ever constrained resources – public sector expenditure on biodiversity in the UK, as a proportion of GDP, has fallen by 42% since a peak in 2008/9¹². There is also uncertainty over the Environmental Land Management strategy and other sources of finance, in the absence of funding from the EU. Some opportunity for investment may be generated by biodiversity net gain tariffs and other natural capital investment and the development of green investment bonds, but this is still largely an unknown. As such, the Strategy's ambitions have been considered alongside a pragmatic need to actually deliver. With greater resources, greater achievements could be realised and targets could be achieved quicker; therefore the objectives and targets of the Strategy should be seen as a minimum of ambition.

It is intended that the targets will be owned by all that have an opportunity to influence and impact biodiversity in the county – from statutory agencies to local planning authorities and parish councils; land owners to non-governmental organisations; those that use the land to those that benefit from its services. All have a role to play and the Kent Nature Partnership umbrella brings these players together to help deliver the Strategy's aspirations for biodiversity. In particular, the Kent Nature Partnership will work with the county's local planning authorities so that the Strategy's ambitions can be embedded and delivered through local plans that appropriately consider, protect and enhance Kent's valuable natural capital resource and the services it provides.

The natural world and sustainable growth can work well together: let us lead the way in demonstrating how this is done in Kent and Medway.



OUR 25-YEAR MISSION AND GOALS

The Kent Biodiversity Strategy aims to deliver, over a 25-year period, the maintenance, restoration and creation of habitats that are thriving with wildlife and plants, ensuring the county's terrestrial, freshwater, intertidal and marine environments regain and retain good health.

The Strategy looks to protect and recover threatened species and enhance the wildlife habitats that Kent is particularly important for. It also aims to provide a natural environment that inspires citizen engagement and is well used and appreciated, so that the mental and physical health benefits of such a connection can be realised by the people of Kent.

This will be achieved through the delivery of the following goals:

Terrestrial ecosystems, habitats and species:

by 2045 Kent has a rich and growing terrestrial biodiversity, underpinned by more resilient and coherent ecological networks and healthy, well-functioning ecosystems.



Marine ecosystems, habitats and species:

by 2045 Kent is making its contribution to reversing the loss of marine biodiversity and delivering clean, productive and biologically diverse oceans and seas through good management.



Freshwater and intertidal ecosystems, habitats and species:

by 2045 Kent has clean, plentiful and biologically diverse freshwater and intertidal ecosystems underpinned by implementation of a catchment-based¹³ approach.



Connecting people with the natural environment:

by 2045 the widest possible range of ages and backgrounds will be benefiting from the mental and physical health benefits of the natural environment; and we will have inspired the next generation to take on guardianship of the county's biodiversity



A BROADER FRAMEWORK FOR BIODIVERSITY RESTORATION

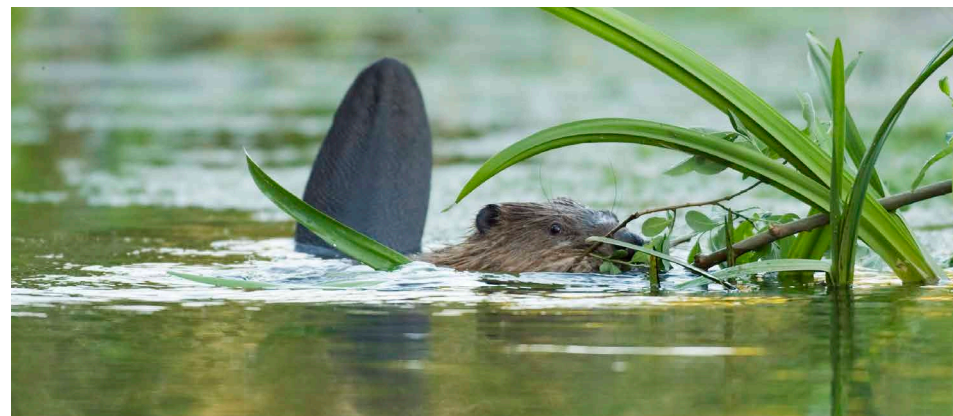
Whilst the Strategy frames its actions around four goals, there are overarching considerations that run through all the objectives, which will be addressed throughout the lifetime of the Strategy.

NATURE CONSERVATION, WILDING AND A LANDSCAPE-SCALE APPROACH

Firstly, is the manner in which we deliver biodiversity restoration. Conventional conservation land management measures for specific habitat or species targets, such as those set by this Strategy, will help us preserve and protect our threatened and rare habitats and species and maximise the value of existing biodiversity rich sites. We also need to expand and buffer these core sites, through restoration, creation and connection, to ensure they can respond and adapt to a changing climate and other pressures.

However this form of traditional, prescriptive conservation management, whilst effective in the protection of specific habitats and species may not precipitate the levels of biodiversity and bio-abundance (overall biomass of species) which the recent State of Nature reports have shown remain in sharp decline. To achieve this we need to look at where we may reinstate natural processes to deliver a more dynamic, bio-diverse mosaic habitat and maximise the overall biodiversity of sites.

Naturally functioning habitat mosaics, operating to natural environmental processes (hydrology, nutrient status, soil and sediment and associated biological processes), provide the most complete and most sustainable expression of our characteristic flora and fauna. They provide a means by which we can support each of our species in ways that provide space and opportunity for all other species. Our native species have evolved to exploit niches in naturally functioning habitat mosaics, and their integrated conservation is best based on these niches as far as possible. Such habitat mosaics are particularly rich in natural capital, providing a wide range of vital ecosystem services such as carbon storage,



enhanced water quality and supply, cultural and amenity benefits, flood risk management and environmentally sensitive food production. Critically, they also provide the greatest resilience to climate change, allowing habitats and species the greatest opportunities to change and move around the landscape as climate shifts.

Wilding presents an opportunity, in the right place, to allow natural processes to occur with minimal human intervention, not only making space for nature but allowing nature to drive its own recovery, deliver landscape-scale restoration of ecosystems and establish mosaic habitats. And, where appropriate, this will include restoring keystone species as natural engineers to help shape the landscape and its habitats; the evidence from beaver reintroductions across the UK demonstrates the value in this approach and may lead to the declaration of beaver as a native species once again after a 400 year gap.

With this approach must be a recognition that sometimes species may be lost but against a backdrop of greater overall abundance. Without employing such an approach in parts of the county, we will continue to see species declines and a further breakdown of the natural processes which underpin the ecosystem services which are so important to wider society.

Over the course of the Strategy, we need to consider how the wilding approach may be developed and applied within Kent, the appropriate scales at which it can happen and measures to track the benefits it provides. And we need to ensure that any action we take in the interim doesn't preclude this as an option for the county, enabling it to form a key foundation to our Nature Recovery Networks.

CLIMATE CHANGE AND NATURAL SOLUTIONS

Climate change will have a major impact on biodiversity in Kent over the next few decades and within the actions we take, we will need to consider how we help nature to respond and effectively “climate proof” our vulnerable habitats and species. We need to move forward from putting forward strategies and practices based on resisting ecological change to ones that anticipate and accommodate that change. We are already seeing the effects; for example, breeding tern colonies are regularly lost to the effects of sea level rise and increased storm events, and woodland bird declines may be linked to changes in the emergence of caterpillars. There are also new species from warmer climates colonising the county, such as Norfolk hawk dragonflies, the Ivy Bee and European Orchard Bee. Freshwater wetlands will be more difficult to maintain due to predicted drier summers, so we will need to develop plans to ensure that we make the most of the water we have. We will need to adapt our coastline to ensure that our internationally important intertidal habitats are given room to breathe. But most importantly, we need to deliver landscape-scale recovery, creating bigger, better and more joined-up habitats that will give biodiversity the best hope of adapting to the big changes that are coming our way.

The environment presents many potential nature-based solutions to the climate emergency. Trees and hedgerows and habitats such as grassland, wetland and saltmarsh all provide natural carbon sinks that can provide a significant contribution to carbon neutrality targets. And the natural environment also provides other mitigation and adaptation to the impacts of climate change, in particular for flooding and drought. In nature-based actions to tackle the climate emergency, we will be simultaneously protecting and extending biodiversity and biomass.

HEALTHY AND FERTILE SOIL

Healthy and fertile soil underpins our economically important farming and forestry sectors in Kent. It also provides a habitat for a wide range of organisms that in turn provide food for wildlife. Soils also provide nesting habitat for our important pollinator species. We need to improve our understanding of soil health in the county and will look to use the new soil health index to be developed by the Government in the context of the 25 Year Environment Plan, at both farm and county level. This will help us to support farmers to achieve good

soil management practices such as the use of cover crops and grass leys in arable rotations, and rotational planned livestock grazing.

The Knepp Estate in West Sussex has pioneered a more naturalistic grazing approach, whereby conventionally farmed fields were allowed to more naturally regenerate using herds of free-roaming livestock and in Kent there are a number of farmers leading the way using rotational livestock grazing systems. Such approaches allow greatly enhanced storage of carbon and, importantly, soil biomass and organic matter. Similarly, no-tillage arable farming grows crops without disturbing the soil and this also ensures healthy soils, carbon sequestration and the build-up of soil organic matter.

The adoption of ‘pop up Knepps’ within Kent and also a greater move from conventional agriculture to regenerative agricultural practices¹⁴ will improve soil health, soil biomass and carbon storage and provide a vital part of a regenerative agriculture approach within the county.

INVASIVE NON-NATIVE SPECIES

The long-term control of detrimental invasive non-native species (INNS) is a vital part of positive management across terrestrial, freshwater, intertidal and marine environments. Non-native invasive species reduce resources and habitat availability for native species; cause disease; increase flood risk; damage health, infrastructure, amenity value and our economy. Unfortunately, in Kent, there are invasive species which have already spread to a degree that we can no longer control. To safeguard our natural landscape, native species and habitats, as well as improve H&S and biodiversity, a catchment-based approach to invasive non-native species control is the only effective and long-term solution. KNP Partners are involved in the delivery of a Regional Invasive Alien Species Management Plan (RIMPS), which targets freshwater aquatic, riparian and coastal waters and supports the Non Native Species Secretariat’s ‘Check, Clean, Dry’ campaign, which aims to promote good biosecurity practices.



TERRESTRIAL ECOSYSTEMS, HABITATS AND SPECIES

By 2045 Kent has a rich and growing terrestrial biodiversity, underpinned by more resilient and coherent ecological networks and healthy, well-functioning ecosystems.

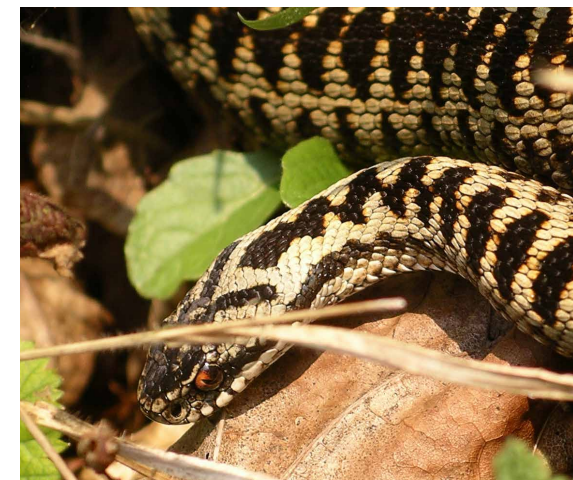
Over the last few decades, we have lost significant areas of many of our most precious habitats. We now need to restore those degraded habitats, replenish our depleted soils and arrest the decline of native species to deliver robust ecological networks that are sustainable, ecologically coherent and resilient to climate change. We will expand our use of natural processes and natural solutions to ensure more sustainable use and management of habitats, to provide biodiversity net gains, and to protect and grow our natural capital.

Our objectives for terrestrial ecosystems, habitats and species are, by 2045:

- 20.84% high value semi-natural habitat (74,750 ha) well managed¹⁵ for nature¹⁶ (from the 2015 baseline of 14.6% and 54,640 ha).
- An ecological network of semi-natural habitat (high and low value) covering 30% of Kent (112,000 ha)¹⁷ (from the 2015 baseline of 27% and 100,872 ha).
- 75% Sites of Special Scientific Interest restored to favourable condition, securing their wildlife value for the long term (from the 2019 baseline of 68%).
- Over half of Local Wildlife Sites in good management¹⁰, securing their local wildlife value for the long term (from the 2019 baseline of 43%).
- More, bigger and less fragmented areas of wildlife-rich habitat outside the protected sites network for wildlife, with an increase in the overall extent of all priority habitats to ensure greater connectivity and resilience to climate change.
- New development to better provide for a greener urban environment, through increased urban tree planting, the inclusion of integral wildlife niches, and green building and landscape design.
- Protect and restore existing trees, hedgerow and woodland, whilst increasing the county’s tree cover with the right trees in the right places, which supports the recovery of wildlife, delivers natural climate solutions and enriches people’s lives.
- Kent-specific threatened and iconic species of terrestrial animals and plants are recovering, including those that support ecosystem services (for details, see Species table below).

The following have been selected as terrestrial priority habitats and priority and indicator species. The targets for each of these are detailed in Appendix 1.

| Priority habitats | Priority species | Indicator species |
|--|---------------------------|-------------------|
| Lowland Beech and Yew Woodland | Shrill Carder Bee | Hedgehog |
| Lowland Mixed Broadleaved Woodland | Turtle Dove | Serotine bat |
| Chalk grassland | Nightingale | Common Blue |
| Lowland meadow | Swift | Lady Orchid |
| Lowland dry acid grassland / Lowland heathland | Adder | |
| Hedgerows | Adonis Blue | |
| Brownfield | Heath Fritillary | |
| Traditional orchard | Dwarf or Kentish Milkwort | |



FRESHWATER AND INTERTIDAL ECOSYSTEMS, HABITATS AND SPECIES

By 2045 Kent has secured clean, plentiful and biologically diverse freshwater and intertidal ecosystems underpinned by implementation of a catchment-based approach.

The freshwater and intertidal habitats of Kent and Medway represent a tiny proportion of their former extent^{19,20}, with many lost through factors such as agricultural intensification and drainage, and degraded through abstraction and pollution. They are also particularly sensitive to climate change impacts and recreational pressures and disturbance (this latter pressure is addressed under Connecting people with the natural environment). We need to secure the long-term sustainable management of these fragile ecosystems by rebuilding and developing ecological networks that are sustainable, ecologically coherent and resilient to climate change. To do this, we will need to ensure that we replace like for like habitat lost to coastal realignment and make innovative use of natural flood and drought management solutions. Only then can we also ensure that these habitats are able to support vital ecosystem services such as carbon storage, groundwater recharge and flood control.

Our objectives for terrestrial ecosystems, habitats and species are, by 2045:

- 75% freshwater SSSIs restored to favourable condition, securing their wildlife value for the long term.
- Over half of Local Wildlife Sites in good management²¹, securing their local wildlife value for the long term.
- Reaching or exceeding objectives for rivers, lakes, coastal and ground waters that are specially protected, whether for biodiversity or drinking water as per our River Basin Management Plans²².
- No deterioration in the status of any water body in Kent. If deterioration of any element's classified status occurs, actions will be implemented to reverse the decline.
- Improve 375 km (15 km per year) of waters in Kent (rivers, lakes, canals, groundwater, transitional and coastal waters). The enhancements include work to improve ecological, chemical and/or physical quality, e.g. reducing pollution, restoring flows and improving habitat²⁴.

The following have been selected as freshwater and intertidal priority habitats and species. The targets for each of these are detailed in Appendix 1.

| Priority habitats | Priority species |
|---|------------------|
| Rivers | European eel |
| Chalk streams | Lapwing |
| Ponds | Sandwich tern |
| Coastal and floodplain grazing marsh | Water vole |
| Intertidal mudflats and coastal saltmarsh | True Fox-sedge |
| Wet woodland | |
| Vegetated shingle | |



MARINE ECOSYSTEMS, HABITATS AND SPECIES

By 2045 Kent is making its contribution to reversing the loss of marine biodiversity and delivering clean, productive and biologically diverse oceans and seas through good management.

The seas around the coast of Kent and Medway contribute to the wider UK marine environment – home to ‘the widest range of marine habitats of any coastal waters in Europe’²⁵– yet they have been badly neglected and depleted over the last few decades. Whilst plastics in the aquatic environment has recently received public attention, and subsequently government action, this is just one of many issues facing the marine waters off Kent’s coastline. These pressures include water quality, invasive non-native species, habitat destruction from fisheries and other offshore activities and land-based pressures such as pollution and disturbance. Our seas and coastal waters do not follow political or regional boundaries and so, to ensure that we have marine habitats which can support healthy, sustainable ecosystems, we need to complete our ecologically coherent network of well-managed Marine Protected Areas (MPAs), as well as working more closely with local stakeholders to ease the impacts of human activity from source to sea.

Our objectives for terrestrial ecosystems, habitats and species are, by 2045:

- A series of Marine Protected Areas off the coast of Kent, forming an ecologically coherent network that is effective in conserving marine habitats.
- There will be no further decline of Kent’s Marine Protected Areas, which will be showing signs of recovery as a result of regular monitoring²⁶ and well-informed management that limits damaging activities.
- Kent’s Marine Protected Areas will be improved and extended so that representative habitats missing from the network are featured and offered protection as required.
- Pressures will be assessed and appropriate management identified and implemented for the entirety of Kent’s Marine Protected Areas to adequately protect the features for which those areas were designated (it is the intention that this objective will be achieved within the shorter timeframe of 2025).
- The South East and South Marine Plans are being applied and have been integrated within relevant local plans.
- We will be managing shellfish stocks sustainably and harvesting shellfish in a non-environmentally damaging way.
- There is better understanding of the subtidal and tidal environment and ephemeral marine features, with the development of spatial management plans and strategic action for those areas at most pressure.
- The natural capital value of the marine environment as a carbon sink is better understood and being managed to realise this contribution.

The following have been selected as marine priority habitats (nominated). Due to the innate difficulty of undertaking meaningful monitoring of marine species at a county level, no targets have been set for marine species; however harbour and grey seals have been included as an indicator species for the health of the estuarine environment. The targets for each of these are detailed in Appendix 1.

| Priority habitats | Indicator species |
|---|------------------------|
| Intertidal chalk and subtidal chalk (nominated) | Harbour and Grey Seals |
| Subtidal mud (nominated) | |



CONNECTING PEOPLE WITH THE NATURAL ENVIRONMENT

By 2045 the widest possible range of ages and backgrounds will be benefiting from the mental and physical health benefits of the natural environment, and we will have inspired the next generation to take on guardianship of the county's biodiversity.

Fundamental to the recovery of Kent and Medway's habitats and wildlife is the need to reconnect local people with their natural environment and to rekindle their enthusiasm for, and appreciation of, nature: many of us only value and protect what we care about. We need to work with all generations, and young people especially, to ensure local people have the opportunity for regular contact with our natural world, and have the tools and vision to regain the biodiversity that has been lost.

Kent is a densely populated part of the country, which is a pressure on our sensitive wildlife sites that are vulnerable to disturbance; and not all areas of high biodiversity value and importance are suitable for public access for this very reason. But the close proximity of these sites to the population is also an opportunity for people to experience nature, learn to love it and protect it, and to improve their own wellbeing. The challenge is to mitigate the risks and unlock the opportunities in a way which allows people to access nature in a low impact manner but which still provides a wildlife enhanced experience.

The England Coastal Path will provide people in Kent with a greater opportunity to access the county's special coastal margins and connect with nature; and within Kent this access is extended further by linking up with the Thames Path. To ensure the increased access does not impact on these vulnerable habitats and species, regular monitoring needs to take place which will not only enable protection of these areas but also increase our knowledge of them.

Our objectives for engagement are, by 2045²⁷:

- An increase in the number of health initiatives, bringing more people into contact with the natural environment.
- An increase in the number of people taking action that benefits biodiversity, including citizen science projects, with 23% of Kent's residents participating in environmental volunteering²⁸.
- An increase in the number of opportunities for children and young adults to engage with environmental issues, in and out of school.
- There is more and better quality, accessible natural space and green infrastructure close to where people live and work, particularly in urban areas, where both people and wildlife can thrive; and all new developments will include accessible green space²⁹.
- More people are spending more time in natural spaces and benefiting their mental health and wellbeing³⁰.
- Create a network of visitor "hubs" in key locations in Kent, including North Kent Marshes, Blean Woods and North Downs, that enable an enhanced visitor experience without negatively impacting wildlife and provide a gateway for people to get involved and take action for nature.
- People are using the increased coastal access rights to gain a better connection with, and understanding of, the coastal margins and marine environment.
- Whilst there is an increase in the number and quality of opportunities for Kent's residents to connect with the natural environment, this access is appropriately managed, and impacts from disturbance monitored, so that the health and wellbeing benefits realised are not to the detriment of the natural environment through increased use and associated recreational disturbance.
- Kent's population is supported in making the right environmental choices and are empowered to take direct action for the recovery of nature with their own informed actions.



DELIVERING GAINS – CASE STUDIES FROM AROUND THE COUNTY

| TITLE OF PROJECT | RAISING THE PROFILE OF THE COPPICE INDUSTRY IN KENT |
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| Lead partner | Kent Coppice Workers' Co-operative |
| District | Kent |
| Description | Rotational coppice is a woodland management technique that has been practiced for centuries and Kent remains the stronghold for the industry. In addition to directly supporting around 450 rural jobs it provides a wider range of habitats that high forest management and a specific wildlife community has co-evolved and is adapted to the structural diversity it creates. Continuation and expansion of the industry is affected by planning, specifically loss of work places as these are brown field sites and so ripe for development, biomass policies and – potentially – by Brexit. |
| Habitat | Lowland broadleaved woodland |
| Funding | Commercially viable value-added industry, particularly sweet chestnut |
| Key outcomes | Coppice woodlands provide rural livelihoods and have associated benefits for wildlife including priority species such as dormice (<i>Muscardinus avellanarius</i>), butterflies such as the Heath Fritillary (<i>Melitaea athalia</i>) and the Duke of Burgundy (<i>Hamearis Lucina</i>) as well as birds such as the woodcock (<i>Scolopax rusticola</i>) and nightingale (<i>Luscinia megarhynchos</i>). |
| People | Rural livelihoods, recreational access including dog-walking, healthy living walks, and provide opportunities for research. |
| Challenges | Housing costs, work yards and low product costs. Brexit poses a serious threat to coppice management. |

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| Natural Capital | Natural Capital Accounts for woodland have been prepared by the Forestry Commission, by Forest Enterprise for the estate they manage and the Office of National Statistics; none consider coppice in detail and lack of data on the area of woodland managed as coppice is a contributory factor. |
| Monitoring / indicators | Surveys have been carried out in the past to determine the area of coppice in active management, but this is complex as the rotation length depends on product and can be up to 80 years, so it is very difficult to determine when woodland is not in active management. The best indicator is the area cut per year as this can then be multiplied by approximate rotation determined by the ratio of products. Many woodlands are monitored as part of the National Dormouse Monitoring Project; annual data produced by the People's Trust for Endangered Species. |



| TITLE OF PROJECT | INTRODUCTION OF HAYMAKING TO YALDING LEES TO RESTORE SPECIES-RICH LOWLAND MEADOW |
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| Lead partner | Medway Valley Countryside Partnership |
| Other organisations involved /partners | Yalding Parish Council, Medway Valley Countryside Partnership, local landowners, Saving our Magnificent Meadows (SOMM) HLF Project (Plantlife) |
| District | Maidstone Borough Council |
| Description | Yalding Lees is a 6 ha grassland site. It was classified as rank neutral grassland (GN31) in the 2012 Habitat Survey, and the historical management was a summer cut with the cuttings left on the grassland. The Lees lie at the confluence of three main rivers - the Medway, the Teise and the Beult – and are part of the flood prevention for the local village as a water storage area in times of high river flow. Advice in 2014 from the SOMM Project led to a change of management to hay making (cuttings removed). |
| Habitat | Lowland Meadow |
| Funding | HLF (SOMM Project); Yalding Parish Council; the hay is now of sufficiently good quality that it can be sold and offset against management costs. |
| Key outcomes | Restoration of 3 ha in the area of species-rich floodplain lowland meadow. |
| People | Recreational access including dog-walking; volunteering for conservation tasks with MVCP; school education groups, healthy living walks, and environmental education for adults and Higher Education students. Location for dissertation study. |
| Challenges | Like many areas of Kent, Yalding has housing allocation targets set centrally. There are no development pressures at present but they can't be discounted in the future despite the area's low-lying nature and propensity to flood annually. |

Monitoring / indicators

Species: Indicators of species-rich meadow or grazing marsh e.g. pepper-saxifrage, lady's-bedstraw, salad burnet; also red-shanked carder bee, barn owl.

Open public access via PROW so thousands of visitors per annum. Practical conservation work carried out by contractors for parish council.



| TITLE OF PROJECT | KENT TURTLE DOVE FRIENDLY ZONES (TDFZS) PROJECT |
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| Lead partner | RSPB |
| Other organisations involved /partners | Local Kent farming community and local landowners, Campsites, Natural England, Environment Agency and the National Trust. |
| District | 12 TDFZs across Kent |
| Description | <p>Turtle doves are the UK's fastest declining bird species and they are threatened with global extinction (IUCN Red List of Endangered Species).</p> <p>Kent is the stronghold for turtle dove in the UK. Within Kent, 12 important core turtle dove areas have been identified as the highest priority for the species. These areas are known as Turtle Dove Friendly Zones (TDFZs) and are the areas where the RSPB is prioritising its work. Working with landowners to develop on the ground habitat for the species and engaging with the local community to highlight the plight of the species and promote community habitat delivery for this species.</p> |
| Habitat | <p>Turtle doves have three habitat requirements:</p> <ul style="list-style-type: none"> • Foraging areas consisting of native arable wildflowers (they feed primarily on seed) • Dense scrub and hedgerows for nesting • A freshwater drinking source |
| Funding | This project is funded by the RSPB, Natural England and the Roger De Haan Charitable Trust. Many of the farmers in the project are also supported by Countryside Stewardship. |
| Key outcomes | <ul style="list-style-type: none"> • Advice delivered to at least 75% of land area within each TDFZ • At least 1 farmer/land manager per TDFZ enrolled as a Turtle Dove Farmer Champion |

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| | <ul style="list-style-type: none"> • 2-3 ha of open seed rich foraging habitat per 1 km² in each TDFZ, located within 300 m of suitable nesting habitat. • At least 3 accessible clean water sources per km² • 4000 people positively engaged across the TDFZ network • At least one Turtle Dove Community Champion in place within each active TDFZ to drive forward local action • Establish a network of Turtle Dove Community Champions across the TDFZ network who are linked up and aware of the project as a whole and therein driving forward local action • Establish 0.5 ha of seed rich feeding habitat delivered by focal communities in TDFZs |
| People | <p>A network of local volunteers recruited as part of the project, including Turtle Dove Community Champions, Habitat Advisors and Survey volunteers.</p> <p>Engaging the local community with the plight of the turtle dove and highlighting the importance of Kent for this species. Working with the community to deliver on the ground conservation measures for this species (such as supplementary feeding).</p> |
| Challenges | <p>Loss of suitable habitat because of local developments in Kent.</p> <p>Changes in agri-environment schemes following Brexit.</p> |
| Natural Capital | The creation of feeding areas for turtle doves will benefit pollinating insects and contribute to good soil management. |
| Monitoring / indicators | <p>A team of local volunteers have been recruited to conduct randomly generated turtle dove surveys within the TDFZs to see if the conservation measures we have put in place are actually having an impact on turtle dove populations within the TDFZs.</p> <p>We are also conducting specific turtle dove surveys on many of the sites we are working with as part of the project. This includes the use of trail cameras to monitor turtle dove usage of supplementary feeding areas.</p> |

| TITLE OF PROJECT | GREAT BELLS FARM, ISLE OF SHEPPEY |
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| Lead partner | Environment Agency and the RSPB |
| District | Swale |
| Description | <p>The 193 ha farm is located on the southern half of the Isle of Sheppey, adjacent to Elmley Marshes National Nature Reserve, and is protected by a sea wall. Great Bells would have been a grazing marsh in the past but was converted to arable more recently.</p> <p>Grazing marsh is a very important wetland habitat for breeding waders, such as lapwing and redshank, wintering waterfowl, water voles and a range of scarce invertebrates. Much of this habitat has either been lost through conversion to arable, or damaged through drainage or poor management. The grazing marsh in North Kent is particularly special because of its proximity to estuarine habitats: saltmarsh and mudflats. Many bird species use both habitats for feeding or roosting.</p> <p>Due to sea-level rise, saltmarsh habitat is increasingly under pressure as it becomes squeezed up against the very sea wall defences that protect the grazing marsh. These saltmarsh losses were identified in the Medway Estuary and Swale Shoreline Management Plan (MEAS SMP) and the Environment Agency has developed plans to compensate for these losses elsewhere in the estuary. At some point in the future this might involve the re-alignment of flood defences to allow the estuary to 'breathe', but this could be at the expense of grazing marsh behind the sea wall. This is where the Great Bells Farm project comes in.</p> <p>Great Bells Farm was purchased by the Environment Agency to provide new grazing marsh habitat to replace predicted future losses. Environment Agency commissioned the RSPB to design and build the new wetland habitats due to their experience of designing and managing wetlands, such as at Medmerry and Wallasea. The project was awarded the CIEEM 'NGO Impact Award' in 2014.</p> |

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| | <p>The RSPB and Environment Agency worked closely together to produce a design that would capture the best elements of grazing marsh sites that we know are good for wildlife, such as Elmley Marshes. The design needed to incorporate three main elements:</p> <ol style="list-style-type: none"> 1. Livestock infrastructure, such as gates and cattle handling facilities, so that the site could be appropriately grazed. 2. Predator exclusion fencing around the key areas, so that ground-nesting birds would be able to produce enough chicks to maintain their populations, something which is a particular issue for breeding waders. 3. Hydrological infrastructure, such as dams, sluices and rills (surface features that hold water), to enable the wetland element to be created. <p>The last of these, the hydrological infrastructure, is potentially the most difficult and costly, so we used LiDAR and digital mapping to ensure that water could be held within the site, that we could move water around in the easiest way, that there would be enough surface water to attract breeding waders and that the spoil that would be created could be managed in the most efficient way.</p> <p>The plan also incorporated additional habitat for water vole and bumblebees as part of the Buzz for the Coast project. For the site to be effective as a wetland, water levels needed to be safely managed at a higher level than surrounding farmland, so an automatic pumping system was installed, designed to reduce staff resource required to manage water levels.</p> <p>This digital map was then used to guide the GPS-equipped machinery on site to create a near-replica of the plan on the ground. All excavated material was reused on site.</p> |
| Habitat | Coastal and Floodplain Grazing Marsh |
| Funding | Great Bells Farm was purchased by the Environment Agency |

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| <p>Key outcomes</p> | <ul style="list-style-type: none"> • In 2010 the site had 1 pair of lapwing and 7 pairs of redshank breeding on site. By 2017 this had increased to 47 pairs of lapwing and 24 pairs of redshank. Thanks to the anti-predator fence, lapwing chick productivity has been well above the level required to sustain the population for 6 consecutive years (i.e. greater than 0.7 fledged chicks per pair). This means that Great Bells is putting more lapwings back into the world. • Wintering waterfowl numbers have also increased, with the site regularly holding large flocks of wigeon, teal, curlew and golden plover. • The Maid of Kent Beetle, known only from two locations in the UK previously, has now been found on Great Bells. This large rove beetle is a predator of dung invertebrates and needs chemical-free cow pats to prosper. |
| <p>Challenges</p> | <p>There are a number of issues and learning points involved with a project of this type, including:</p> <ul style="list-style-type: none"> • The site was close to a former World War II air base and the presence of unexploded ordnance (UXO) was discovered prior to excavation. Because of this, we had to closely monitor UXO during the excavation phases of the project using magnetometer surveys, specialist site investigation and army specialists. • There is a lot of history around the Thames, and the project was careful to ensure that we took steps to avoid damaging local archaeology. • It is important to manage costs and risks on a project of this size, and close cooperation between the RSPB, Environment Agency and site contractors was essential. |
| <p>Monitoring / indicators</p> | <p>Pairs of breeding lapwing; Lapwing chick productivity</p> |



| TITLE OF PROJECT | SHINGLE ON THE CUSP |
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| Lead partner | Kent Wildlife Trust |
| Other organisations involved /partners | Ministry of Defence, RSPB, NE, Romney Marsh Countryside Partnership, EDF, Kent & Medway Biological Records Centre |
| District | Shepway District Council |
| Description | <p>Vegetated shingle has been lost over the last few decades due to development and conversion to arable (in the past) and, more recently, gravel extraction, visitor pressure, military activities, beach replenishment activities, flood defence works, and invasive species (mostly from garden escapes).</p> <p>This project is enabling us to test methods of restoring degraded shingle habitats. Brush has been piled at different heights in plots on RSPB and MoD land and is being monitored for vegetation recolonisation and changes in invertebrate assemblage. In addition invasive species are being controlled and leaflets and web content produced to inform local residents on how to protect these habitats.</p> |
| Habitat | Vegetated shingle |
| Funding | HLF (Fifth Continent Landscape Partnership Scheme) - £57,957 for this project; various small match funding pots. |
| Key outcomes | Shingle habitats will be better protected and methods for doing so better understood. Burden of invasive species reduced. |
| People | Land managers will have access to better advice; Kent Wildlife Trust and RSPB volunteers involved in set up and monitoring; new resources (online and printed) for local residents on how to protect shingle habitats. |
| Challenges | Shingle vegetation develops very slowly and is very susceptible to disturbance; the project must continue to run for many years and land use may change over that time. |

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| Monitoring / indicators | <p>Increased coverage of pioneer shingle species i.e. Nottingham catchfly, broom, wood sage, lichens. Monitored yearly.</p> <p>Invertebrates monitored via pitfall trapping in 2018, to be repeated in 2020.</p> |
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| TITLE OF PROJECT | MAKING A BUZZ FOR THE COAST AND THE SHORT-HAIRED BUMBLEBEE RE-INTRODUCTION PROJECTS |
| Lead partner | Bumblebee Conservation Trust |
| Other organisations involved /partners | Kent Wildlife Trust, RSPB, Environment Agency, Natural England, Thames Water, Kent County Council, Swale BC, Thanet DC |
| District | North Kent Coast (Dartford to Deal), South Kent and East Sussex (High Weald, up to Ashford across to Hythe) |
| Description | <p>Kent is the most important county in the UK for bumblebee species diversity (22 out of the 24 UK species present) with 5 of UK's 7 rarest bumblebee species present including the reintroduction efforts of an extinct species – the Short-haired bumblebee (<i>Bombus subterraneus</i>). The north Kent coast is one of the few remaining UK strongholds for the Shril Carder Bee (<i>Bombus sylvarum</i>), one of the UK's rarest bumblebees.</p> <p>Since 2009, Bumblebee Conservation Trust (BBCT) has created, restored, advised on and improved management on approx. 1600 ha in south Kent and 400 ha grassland restoration and management is underway in north Kent (deliver by 2020).</p> |
| Habitat | Grazing marsh, arable land, semi-improved or unimproved grassland, field margins and hay meadows, orchards, seawalls, native hedgerows, B roadside verges, bee-friendly gardens, soft cliffs, shingle and sandbanks. |



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| Funding | National Lottery Heritage Fund, Thames Water, KCC, RSPB, Natural England and various smaller match funding pots. |
| Key outcomes | <ul style="list-style-type: none"> • Protect and safeguard the nationally important populations of bumblebees found in Kent including Shril carder and attempted reintroduction of Short-haired bumblebee. • Conserve, manage and restore suitable habitats where bumblebee populations can flourish, providing stepping stones and habitat corridors to re-connect fragmented populations. 1600 ha in south Kent and over 400 ha grassland restoration in north Kent. • Working with over 100 farmers and landowners giving bespoke advice across Kent. • 15 roadside nature reserves managed for bumblebees. |
| People | <ul style="list-style-type: none"> • Partners, farmers and landowners, councils etc are advised and work is carried out to habitat and bumblebee populations. • Volunteers carry out bumblebee and wild flower monitoring using the BeeWalk methodology (citizen science); volunteers undertake practical habitat works; many public outreach activities undertaken every year (events, IS courses, workshops, art activities and competitions); Kent Wildlife Trust's Wild about Gardens volunteers undertake bee-friendly gardening. • Thousands of people of all backgrounds and ages engaged and enthused. |
| Challenges | Habitat loss and lack of suitable management, development pressure, intensive agriculture. |
| Natural Capital | Bumblebees, as wild pollinators, are much loved and intrinsically linked to the horticultural and food-growing history, economy and culture of the county. Pollinator eco-services. |
| Monitoring / indicators | Using BeeWalk transect recording data, increase in sites and abundance of key bumblebee species including Shril carder, ruderal, red shanked, moss and brown-banded carder. Monitoring wild flower species by % cover, seasonal length forage and species diversity. |

| TITLE OF PROJECT | IMPROVING THE RIVER BEULT SSSI FOR PEOPLE AND WILDLIFE |
|--|--|
| Lead partner | Environment Agency |
| Other organisations involved /partners | Natural England and local stakeholders |
| District | Maidstone and Ashford |
| Description | <p>The River Beult is a tributary of the River Medway. It is designated as an SSSI because it is one of the few slow-flowing clay rivers in the country that still supports some of the flora and fauna expected in this kind of water body.</p> <p>The river is a vital natural asset because it is a source of fresh water for wildlife and agriculture. It also naturally controls and stores flood waters, supports crop pollination, breaks down pollutants and helps the wellbeing of the local community through interests such as fishing and walking.</p> <p>However, this resource is compromised by issues such as historic modifications made to change the shape of the river channel and control water levels. These impede fish passage and have resulted in flash flooding, poor water quality, reduced flows and excessive weed growth, resulting in loss of habitat and a decline in angling.</p> <p>The project has been working in partnership with local stakeholders, as part of the Medway Flood Action Plan, to understand what services the River Beult SSSI currently provides or supports and how these benefits for people and wildlife can be improved.</p> <p>This has helped us to form a plan to improve the River Beult and we want to work with the community to put this plan into action to develop a more natural river and floodplain which are resilient to pressures including climate change.</p> |
| Habitat | Slow-flowing clay rivers |

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| Key outcomes | <p>To create a River Beult that provides:</p> <ul style="list-style-type: none"> • Natural flood management. • A healthy fishery with good angling participation. • A secure, clean water supply. • An attractive, resilient landscape that supports sustainable agriculture, flourishing wildlife and recreation. |
| Challenges | <p>Historic modifications changed shape of the river channel and water levels, impeding fish passage and resulting in flash flooding, poor water quality, reduced flows and excessive weed growth.</p> |



| TITLE OF PROJECT | GUARDIANS OF THE DEEP |
|--|---|
| Lead partner | Kent Wildlife Trust |
| Other organisations involved /partners | Medway Swale Estuary Partnership (Medway Council), Thanet Coast Project (Thanet District Council), Kent County Council, Natural England. |
| District | Kent and Medway |
| Description | <p>Giving everyone the chance to learn more about the astonishing wildlife that lives around Kent’s shores, providing lots of ideas and activities in which people can help to look after it.</p> <p>Establishing a network of 360 volunteer Coastal Guardians (eyes and ears of the coast); training for volunteers in shore survey techniques and species identification; establishment of a team of trained Coastbusters (volunteers to help tackle the invasion of the non-native Pacific oyster); promotion of Marine Conservation Zones to the wider public.</p> <p>For schools and young people: six-week WildBeach programmes at the coast and Undersea Explorer snorkelling workshops (in swimming pools).</p> |
| Habitat | Coastal – intertidal including chalk reef, shingle spits, clay exposures, biogenic reefs. |
| Funding | HLF, Uren Foundation, D’Oyly Carte Charitable Trust, Kent Wildlife Trust Flourish Fund. |
| Key outcomes | Increased understanding and support for marine protected areas. A more skilled and active volunteer network taking action to help protect coastal areas. Coastal Guardians actively observing areas of coast, supporting the enforcement work undertaken by Kent and Essex Inshore Fisheries and Conservation Authority (KEIFCA). |

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| People | This is a people-focussed project. To date (October 2018) volunteers have contributed over 800 days of volunteer time taking action to protect Kent’s coast. Activities have ranged from general observation and reporting of unusual sightings or illegal activity to beach cleans and seaweed surveys. |
| Challenges | Constant pressure on the marine environment from industry. Huge challenge for KEIFCA in patrolling vast areas of sea to enforce the designated protection. |
| Monitoring / indicators | <ul style="list-style-type: none"> • 360 volunteer Coastal Guardians • 60 school groups undertaking WildBeach activities • 500 children trained in snorkelling skills • 30 non-native control sessions • 75 volunteer surveys events (intertidal habitats and species/marine litter) • 180 people trained in intertidal survey techniques • 180 people trained in an additional course (e.g. marine mammal identification, coast bird identification) • 60,000 people engaged in the project • 150,000 exposed to project information |



| TITLE OF PROJECT | ECOLOGY ISLAND MENTAL WELLBEING GROUP |
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| Lead partner | North West Kent Countryside Partnership and North Kent Mind |
| Other organisations involved /partners | Dartford Borough Council, Public Health |
| District | Dartford Borough Council |
| Description | Ecology Island is a secluded woodland site in the middle of Dartford’s Central Park, with the River Darent running alongside. The wellbeing group participants are referred into the project by NKMind and are in recovery from mental health issues or emotional trauma. Each week they carry out conservation, bush craft and natural craft activities which not only improve the site for wildlife, but significantly benefit the mental wellbeing of the group. NKMind staff are present each week to provide emotional support, and NWKCP lead the activities – each organisation plays to its own strengths to provide a fully-supported service. |
| Habitat | Secondary woodland and riparian |
| Funding | Various sources: Porchlight, Public Health, KCC Members’ Grants, DEFRA Wrap fund, Saving Lives Innovation Fund. |
| Key outcomes | Wellbeing improvements for participants. Better managed woodland. Access and interpretation improvements. |
| People | The site is used and maintained by a group of approx. 12 people who are in recovery from mental health issues. Several of them have gone on to pursue further outdoor volunteering opportunities and one participant has gained employment in the countryside sector through this project. |

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| Challenges | Project funding is a constant challenge – no long-term funding solution has yet been found. The site is prone to fly tipping which can be disheartening for the group, although their regular use of the site seems to have improved the issue. |
| Monitoring / indicators | Participant wellbeing is monitored through Warwick Edinburgh Mental Wellbeing Scale questionnaires. |



APPENDIX 1

KENT BIODIVERSITY STRATEGY PRIORITY HABITATS, PRIORITY SPECIES AND INDICATOR SPECIES TERRESTRIAL HABITATS AND SPECIES

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³¹) | 2025 target | Rationale |
|---------------------------------------|---------------------------------------|--|-----------------------------|--|
| Lowland Beech and Yew Woodland | Natural England / Forestry Commission | 613 ha UK BAP priority habitat | Restore 92 ha; create 49 ha | Lowland beech and yew woodland is particularly distinctive in Kent with notable examples existing within the High Weald and Kent Downs Areas of Outstanding Natural Beauty. However beech is sensitive to drought and is likely to be particularly vulnerable to the projected changes in rainfall and temperature in the south-east of England, with beech and yew woodland on free-draining calcareous soils being most at risk. To build resilience, an increase of 15% is desirable by 2025 through a combination of restoration of conifer plantations on ancient woodland sites and new woodland creation. Currently agri-environment schemes are a key funding mechanism for this work and the proposals set out in the 25 YEP to design a new woodland creation grant scheme, involving landowners, farmers and stakeholders would suggest that some form of funding will continue, with a clear drive set out to incentivise larger scale creation to meet carbon goals and wider environmental benefits at a landscape scale. There are also likely to be opportunities for woodland creation and restoration as part of the environmental net gain principle taken forward through development. |

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³¹) | 2025 target | Rationale |
|---|---------------------------------------|--|--|---|
| Lowland Mixed Broadleaved Woodland | Natural England / Forestry Commission | 153 ha UK BAP priority habitat | Restore 30 ha; create 16 ha | Lowland mixed deciduous woodland can have a hugely biodiverse canopy layer and ground flora and is a robust habitat with respect to future climates. Much of this woodland has been lost through clear-fell and plantation planting. By 2025 an increase of 30% is desirable through a combination of restoration of conifer plantations on ancient woodland sites and new woodland creation. Agri-environment schemes are a key funding stream for this work but there may also be opportunities for woodland creation and restoration as a result of future development through mandatory net gain. |
| Chalk grassland | Natural England | 1159 ha UK BAP priority habitat | 730 ha creation; 770 ha enhancement and restoration of semi-improved chalk grassland | Kent supports around 5% of the UK's chalk grassland habitat with around 2000 ha in total; 1159 ha being of the highest quality and a further 770 ha being semi-improved chalk grassland. There are currently 4 projects underway in Kent targeting management, restoration and maintenance: Old Chalk New Downs hosted by Kent County Council; Natural England's East Kent Focus Area; Darent Valley Partnership hosted by the Kent Downs AONB; White Cliffs Partnership hosted by Dover District Council. |
| Lowland meadow | Kent Wildlife Trust | 27 ha UK BAP priority habitat | 25 ha creation; 100 ha enhancement and restoration | Kent supports 27 ha of BAP priority habitat quality grassland and a further 430 ha of species-rich neutral grassland, which meets Farm Environment Plan criteria. The Saving our Magnificent Meadows (Plantlife / MVCP) and Ashford Meadows (KWT) projects have delivered 11 ha of meadow creation and approximately 50 ha of meadow restoration and enhancement on sites such as Alex Farm Pastures SSSI and Moat Farm. In addition, there will be new opportunities for meadow creation or enhancement work through agri-environment schemes and projects delivered by KNP partners and others. |

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³¹) | 2025 target | Rationale |
|---|---------------------------------------|--|--|--|
| Lowland dry acid grassland / Lowland heathland | Kent Wildlife Trust | 261 ha Lowland dry acid grassland UK BAP priority habitat / 74 ha Lowland heathland UK BAP priority habitat | Enhancement and restoration of 5 ha heathland; 20 ha acid grassland. | Identifying acid grassland as UK BAP priority habitat type is difficult outside of the optimal survey season, which has led to widely varying figures for the extent of this habitat in Kent. However, it is clear that both heathland and acid grassland are some of the rarest and most threatened habitats in the county, that opportunities for habitat creation are limited, and that poor management of acid grassland is frequently a key factor in the loss of this habitat. The focus therefore needs to be on supporting existing landowners with ongoing management advice and identifying new sites where these habitats can be restored and enhanced, either through removal of scrub and secondary woodland or through improvements to more established habitats. These targets include work within the Sevenoaks Greensand Commons HLF project and sites such as Stelling Minnis Common and Ashford Warren. |
| Hedgerows | Medway Valley Countryside Partnership | Approx. 11,734 km ³² | Restore 2250 km and plant 2250 km new species-rich hedgerow | From 1990 onwards the decrease in managed hedgerows in Kent has been predominantly through inappropriate management rather than actual hedgerow removal. The targets for planting new hedgerows and restoring relict hedgerows and woodland shaws aim to reverse this trend, and will principally be delivered by the KNP partners and others through mechanisms such as agri-environment schemes. |

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³¹) | 2025 target | Rationale |
|----------------------------|---------------------------------|--|---|--|
| Brownfield | Buglife and Kent County Council | Exact resource unknown but key sites in North Kent | To map and maintain the county's best and significant brownfield sites and manage them appropriately for their significant species. | The county has some significant brownfield sites that support an extremely rich diversity of wildflowers and animals, including nationally scarce invertebrates, but often brownfield is prioritised for development. Within the county we need to better understand and quantify the brownfield resource so that, through planning, the best examples can be retained and managed; and where sites are lost, the value is understood and consequently they are properly mitigated for. |
| Traditional orchard | Kent Downs AONB Unit | 1699 ha (source Natural England) UK BAP priority habitat | Maintain in favourable condition 39 ha; restore 8 ha and create 67 ha | Traditional orchards are scattered across Kent with many cherry orchards sited within the Faversham Fruit Belt. Through supporting and accurately assessing the extent, condition and composition of these traditional orchards, there are opportunities to take forward potential orchard conservation and restoration projects. There is a growing interest in community orchards with several in existence and new plantings appearing within new developments giving our target of 67 ha. Many existing orchards have been adopted by the local communities, passionate about retaining their heritage. Projects for the maintenance, restoration and creation of traditionally managed orchards will be supported where they form part of wider projects for the restoration of wildlife habitats at a landscape scale. |

| Priority species | Champion | Status | 2025 target | Rationale |
|--------------------------|------------------------------|--|--|---|
| Shrill Carder Bee | Bumblebee Conservation Trust | One of the UK's rarest bumblebees, which has declined rapidly in its national distribution in last 50 years. Kent remains a national stronghold; recent Kent records (2008-2019) show the species present in 17 10 km x 10 km (79 2 km x 2 km tetrads). Key sites with good numbers found along the north Kent coast in Dartford, Hoo peninsula and Swale. Records beyond Seasalter on the north Kent coast are much fewer and more scattered. Records from east Kent sites have been very few over the last decade (in single figures). | By 2020, an increase in the distribution of SCB bees in recording hectads (10 km x 10 km) in Kent. In addition, by 2023, male and/or queen shrill carder bees are recorded on all Beewalk transects where the species is known to occur. | With bumblebees, presence alone is not necessarily a good indicator of how populations are faring, and one needs to take into account effective population size (numbers of males and queens, which are the reproductive castes, as opposed to the workers). This target cannot be an annual target: the males and queens can sometimes be hard to detect and may not always get picked up on any transects. This data will be collected as part of the national monitoring scheme for bumblebees (BeeWalk). |
| Turtle Dove | RSPB | The Turtle Dove is the UK's fastest declining bird species and is threatened with global extinction (IUCN Red List of Endangered Species). Breeding populations, both in England and in Europe, have collapsed in recent decades and the decline is continuing. The latest UK Breeding Bird Survey data shows a 93% fall in breeding abundance between 1995 and 2014. The species is now included on the UK Red List of Conservation Concern. | To maintain the population of turtle doves in the 7 highest priority Turtle Dove Friendly Zones by 2020 (out of a total of 13 TDFZs in the South East) and for activity to have begun in the remaining 6 Turtle Dove Friendly Zones. | For species that are declining rapidly, the best option is to apply science-based conservation solutions in the areas where they still breed in reasonable densities. This means that the most effective conservation action will be delivered in the most effective places. For turtle doves, the RSPB has used Breeding Bird Atlas data to identify 'Turtle Dove Friendly Zones' and works with Natural England and local farmers to provide feeding habitat and supplementary feeding. We have good evidence to suggest that a lack of quality food is the primary cause of decline in turtle doves. |
| Nightingale | RSPB | The nightingale is one of our most severely-threatened birds – its population has declined by more than 90% in the last 50 years. Fewer than 5,500 pairs now remain across the country. The range of nightingales has also contracted dramatically, so they are now found only in the south and east of England. With an estimated population of 1,450 to 1,550 singing males, Kent is now the stronghold for this species in the UK. | 1,450 to 1,550 singing males. | For a species declining so rapidly, just maintaining the existing population is ambitious. We need to ensure that existing nightingale breeding habitat is protected from development and managed appropriately, ensuring that dense scrub is available and invertebrate food is abundant. We also need to plan ahead and ensure that new woodland planting schemes are designed to provide good habitat for nightingales. |

| Priority species | Champion | Status | 2025 target | Rationale |
|--------------------|--------------------------------|--|---|---|
| Swift | RSPB | The 57% decrease in their breeding numbers in the UK between 1995 and 2016 has made swifts an amber-listed species. Swifts are difficult to monitor, but the most recent population estimate for Kent was 3,000 to 7,000 pairs. | To stop the decline of swifts by ensuring that every new house built in Kent contains one swift-box or nest-brick. | We still do not fully understand the reasons for the collapse in swift numbers, but the loss of nest sites is at least partly responsible. These migrant birds return from their wintering grounds in Africa to the same spot each year to breed – usually in buildings, in gaps under roof tiles and eaves. Due to our tendency to seal up buildings during renovation or knock them down, swifts are returning to discover their nest site has gone or access is blocked. Declines in aerial invertebrates, which are food for swifts, are also likely to be a key factor, and the Kent Biodiversity Strategy's aspirations for wetland habitat creation will help with this. |
| Adder | Kent Reptile & Amphibian Group | There is evidence of a considerable decline in adder distribution. In the period 1980 to 2005, 15,154 monads were recorded as occupied by the species. In 2006 to 2011 this fell to 9,237. This amounts to a potential decline of 39%. ³³ | Increase by 2.5% per annum in the adder range (number of monads occupied) and overall frequency of recording. | The interpretation of data will take into account results from long-term monitoring in Kent that will indicate how prevailing conditions have influenced adder detectability and hence affected the potential recording rate. The baseline will be provided by records received by the Kent Reptile and Amphibian Group in 2018. |
| Adonis Blue | Butterfly Conservation | The National Status is Near Threatened. Butterfly Conservation's county priority for this butterfly is High, because Kent is home to 14% of the national population. | To retain Adonis Blue on all known sites and locate more sites, to show an increase in the known distribution of 73 1 km squares. The Adonis Blue population trend (monitored by the UK Butterfly Monitoring Scheme) is Stable or Increasing. | Adonis Blue is restricted to, and representative of, good quality chalk grassland habitat, and as such is an indicator of wider habitat quality and a healthy, functioning and managed landscape. |

| Priority species | Champion | Status | 2025 target | Rationale |
|--|--------------------------------|---|---|--|
| Heath Fritillary | Kent Wildlife Trust | Heath fritillary is one of the UK's most restricted and most threatened butterflies. It is restricted to only four locations in the UK, including a discrete population in The Blean, Kent. It is listed in Section 41 the NERC Act as being a species of principal importance. It is a UK High Priority species for Butterfly Conservation and is one of the seven top priority butterflies in Butterfly Conservation's Regional Conservation Strategy for South East England 2016 to 2025. Heath fritillary would almost certainly have become extinct in the UK were it not for conservation efforts over the past three decades. Extensive targeted habitat management is undertaken within the Blean woodland complex. | Maintain a minimum of 25 interconnected colonies in Kent. Increase the area of suitable interconnected habitat within the Blean complex through active coppice, non-native tree removal, and grazing, to create and maintain open areas, enhance food plant distribution in the Blean to 1980 levels by 2010 and then maintain (30 ha per year). Establish new populations outside of the current distribution to safeguard and enhance the status of the population. | Heath fritillary is restricted to the Blean woodland complex in Kent, and to the distribution of the food plant (common cow wheat). The Blean is one of the largest areas of ancient woodland in England – over 2,800 ha. Management for heath fritillary delivers additional and wide-ranging benefits for other woodland species and habitat quality, and acts as a driver for positive outcomes for biodiversity. |
| Dwarf or Kentish Milkwort (Polygala amarella) | Kent Botanical Recording Group | The rarest Milkwort; when treated as subsp. austriaca, it is considered critically endangered. | Mapping and monitoring and action to move towards removal of this species from the brink of extinction by 2050. | The Species Recovery Trust has been focussing on this species in recent years and is targeting its removal from the brink of extinction by 2050. Optimum habitat requires continued appropriate management at the three current locations where the plant is known to survive. The Species Recovery Trust has been working on re-introduction, with a focus on site(s) which appear suitable but do not have records (so that introduction cannot give rise to confusion with any possible natural reappearance at old sites). |

| Indicator species | Champion | Status | Indicator measure | Rationale |
|-------------------|-------------------|---|---|---|
| Hedgehog | Kent Mammal Group | The population now appears to be in dramatic decline, with at least a quarter of the population lost in the last decade ³⁴ . | Number of tetrads where this species is recorded. | There are no official monitoring schemes for this species and the current Kent mammal distribution atlas (2015) is based on ad hoc records and the Kent Mammal Group's voluntary mammal recording projects. KNP partners and others will continue to increase awareness of this species, to promote campaigns such as the People's Trust for Endangered Species' Hedgehog Street ³⁵ and to promote advice to land managers, including farmers and gardeners. |

| Indicator species | Champion | Status | Indicator measure | Rationale |
|--------------------------------------|--------------------------------|--|--|--|
| Serotine bat | Kent Bat Group | Widespread but declining ³⁶ . | Colony counts of maternity roosts at known Kent serotine roosts. | This indicator provides a means of monitoring population trends and can be monitored effectively and with a good degree of accuracy as part of the National Bat Monitoring Programme. Ensuring no net loss of roosts is difficult, in part as a major contributing factor in roost loss (all known serotine maternity roosts are in buildings, mainly houses) appears to be changes of temperature regimes. However, there is also a difficulty in finding the maternity roosts as this is not easy and requires manpower. Gaining roosts will depend on good relationships with landowners, favourable landscape management i.e. agri-environment schemes, and access to good land management advisors. |
| Common Blue | Butterfly Conservation | Widespread across Kent and most of the UK. Its Conservation status is Low. | Monitored via the UK Butterfly Monitoring Scheme transect system and through casual recording. This will provide data on the distribution and abundance of the butterfly and this can also be compared with national trends. | A widespread butterfly found in a variety of habitats. The caterpillar feeds on widespread plants, primarily Common Bird's-foot-trefoil (<i>Lotus corniculatus</i>), but also Greater Bird's-foot-trefoil (<i>Lotus pedunculatus</i>), Black Medick (<i>Medicago lupulina</i>), Common Restharrow (<i>Ononis repens</i>), and White Clover. This butterfly is therefore a good indicator of the health of the wider countryside and also abundance/connectivity/isolation of flower-rich habitats, particularly within towns. |
| Lady Orchid (Orchis purpurea) | Kent Botanical Recording Group | Kent has the main national populations, which occur across the breadth of the chalk in Kent, although more in the east. Most populations are small, and it is suspected that many are gradually declining. | Number of records of this species. | The Lady orchid is a highly sensitive indicator of well-managed coppice woodland on chalk. |

FRESHWATER AND INTERTIDAL HABITATS AND SPECIES

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³⁷) | 2025 target | Rationale |
|----------------------|-------------------------|--|---|--|
| Rivers | Environment Agency | 6592 ha ³⁸ | Improve 105 km of waterways (15 km per year x 7 years) | This target is based on the Key Performance Indicator of 'length improved' used by the Environment Agency. However, this figure is based on the Environment Agency's area which includes East Sussex, part of Surrey, South London and Kent and it is therefore difficult to give a precise figure for Kent only. The target is therefore a conservative figure. |
| Chalk streams | South East Rivers Trust | 104.5 km | Raise the profile and prioritise the restoration of this globally rare freshwater habitat | A globally rare habitat; there are only about 250 chalk streams in the world, about 160 of them are in England, with some raising from the chalk aquifer of the North Downs under Kent, inc. River Darent, Great Stour, Little Stour, Nailbourne, Dour and North and South Streams. Characterized by stable flow and temperature regimes, low energy and sediment inputs from groundwater spring sources, which has made them productive environments rich in aquatic ecology that has evolved and specially adapted to this character. Chalk streams of Kent are impacted by ground water abstraction for drinking water supply, due to high population densities in the South East. |
| Ponds | Natural England | 19,206 ponds ³⁹ with a total area of 7,039,121 m ² | By 2021, 322 additional ponds with a total area of 161,000 m ² | The two year target for additional ponds to be created or restored in Kent is based on the requirement under the district level licensing for great crested newts (GCN) across Kent considering development at a landscape scale. This requirement has been used as a target for the habitat as it represents a focus on the enhancement of the conservation status of the wider GCN population and is a delivery of net gain in relation to the numbers of ponds across the county. All the ponds will be created or restored to very tight specifications ensuring that they are located in the most suitable habitat with the inclusion of buffer zones thereby linking "stepping stone" ponds and increasing the benefits for not only GCN but other wildlife as well. |

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³⁷) | 2025 target | Rationale |
|--|--------------------|---|--|---|
| Coastal and floodplain grazing marsh | RSPB | 14,174 ha UK BAP priority habitat | Restore 2000 ha | The most likely opportunities up to 2025 will be restoring existing grazing marsh. This target includes habitat creation at Higham Marsh, Harty Marshes, Lydden Valley, Seasalter Levels and the Environment Agency's Flood and Coastal Risk Management programme. In addition to the restoration target for this habitat, the Strategy also aims to ensure that sensitive areas and the species they support are protected from recreational disturbance. |
| Intertidal mudflats and coastal saltmarsh | Environment Agency | 10,078 ha UK BAP priority habitat Intertidal mudflats; 1338 ha UK BAP priority habitat coastal saltmarsh | Create 50 ha of net gain for both habitats combined. | The KNP partners are committed to protecting these habitats where feasible and through shoreline management plans and strategies. The target of 50 ha for coastal saltmarsh & intertidal mud (a shared target) is based on coastal squeeze affecting designated sites; this target requires considerable landowner cooperation and therefore requires a suitably lengthy timeframe for delivery. In addition to the creation target for this habitat, the Strategy also aims to ensure that sensitive areas and the species they support are protected from recreational disturbance. |
| Wet woodland | Environment Agency | 662 ha UK BAP priority habitat | Creation of 10 ha of wet woodland. | Wet woodland can play an important role in flood risk management – a role that is set to increase in years to come as greater use is made of natural flood management solutions. This target is based on work currently taking place to make stream corridors wetter in the Medway catchment; however, reaching the target relies on funding being obtained to continue work beyond 2021. |

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ³⁷) | 2025 target | Rationale |
|--------------------------|-----------------|--|--|--|
| Vegetated shingle | Natural England | 2104 ha UK BAP priority habitat | Maintain total extent of coastal vegetated shingle habitat; ensure no net loss; and restore all coastal vegetated shingle to favourable condition (or unfavourable to recovering). | <p>Shingle is a finite resource. In southern England, much of it is composed of flint eroded out of chalk cliffs and moved by longshore drift along the coast. Shingle in Kent takes the form of the cusped foreland at Dungeness, which is by far the largest site in the UK at over 2000 ha of exposed shingle. The remaining areas in Kent are fringing shingle beaches exposed to storm action and display temporary and mobile strandline communities.</p> <p>Being a finite resource, the target is to maintain the coastal vegetated shingle habitat in Kent, ensuring no net loss. Opportunities to create shingle habitat are extremely limited and of limited success.</p> |

| Priority species | Champion | Status | 2025 target | Rationale |
|----------------------------|---------------------------|--|--|---|
| <p>European Eel</p> | <p>Environment Agency</p> | <p>Abundance of the European eel stock is at a historical low and continues to decline. The current level of recruitment of glass eel (juvenile eel) to Europe is at its lowest level in recent decades, at less than 5%. Average glass eel recruitment to fisheries in Europe has declined by 97%. The decline in eel stocks is an international concern. In 2007, the European Union adopted a Council Regulation⁴⁰ which charged the UK and other member states to take specific actions. Accordingly, Defra brought in our own domestic legislation “the Eels (England and Wales) Regulations 2009”⁴¹, which gave us new powers to protect eels from exploitation and entrainment and require improvements in passage to assist their migration over barriers and weirs.</p> | <p>Demonstrable progress to silver eel escapement targets in all catchments that we influence; secure access for eel to an additional 200 km of habitat.</p> | <p>The over-arching aim is to secure sustainable eel populations.</p> <p>This can be achieved by addressing man-made pressures on eel to prevent a further decline and to support recovery of this species. We should be aiming towards an escapement of silver eel to a minimum of 40% historic levels in all of the catchments we influence. Our aim is to see eel fulfilling its role in the aquatic ecosystem and providing social and economic benefits from recreational fishing.</p> <p>Annual escapement is the outward migration of silver eels (mature eels which have undertaken a change in readiness for migration). The aim of this action is to reduce the obstacles which prevent eels moving downstream to migrate, therefore increasing the number of silver eels that escape from inland and coastal waters and contribute to the spawning stock. At the end of the growing period, the eels mature, males on average 12 years and females on average about 18 years old, and return to the Atlantic Ocean; this stage is known as the silver eel. Eels residing in freshwaters usually initiate their spawning migration as silver eels during autumn. In European eel, the metamorphosis from yellow to silver eels before the marine migration to the spawning area in the Sargasso Sea includes morphological, anatomical, as well as physiological changes and occurs during summer. Estimated annual escapement (outward migration) of silver eels from English waters currently amounts to a total of approximately 977 tonnes.</p> |

| Priority species | Champion | Status | 2025 target | Rationale |
|----------------------|----------|---|---|--|
| Lapwing | RSPB | Between 1995 and 2012, breeding lapwing declined by 47% in South East England. They have been lost from much of the wider countryside due to changes in agriculture, but populations on wet grassland have increased over this time due to habitat creation and enhancement, particularly on the North Kent Marshes. The estimated population of breeding lapwing in Kent in 2013 was 980 to 1,200 pairs. | > 1,000 pairs of breeding lapwing populations. | Breeding lapwing are a good proxy for wet grassland management. There are approximately 800 pairs of breeding lapwing in North Kent, and this area should be the focus for landscape-scale conservation management, involving improvements to hydrological management and grazing management. The target of 1,000 pairs by 2025 would be delivered by more farms entering agri-environment schemes and more habitat enhancement and creation projects. |
| Sandwich tern | RSPB | Sandwich terns in Kent are restricted to the islands in the Medway Estuary, where a population of 300 to 500 pairs has bred since 1996. The colony is under immediate threat from disturbance and sea-level rise. | To retain the colony of 300 to 500 pairs in the Medway Estuary in the short-term and to identify sustainable breeding habitat in North Kent in the long-term. | The Medway Estuary colony of Sandwich terns is regionally important and under imminent threat from sea level rise and disturbance. In the short-term, we need to bolster the existing nesting habitat, seeking to increase the height of the islands to prevent over-topping on high tides. In the long-term, we need to identify new habitat in North Kent, which could be new, bespoke habitat creation, or as part of a coastal re-alignment scheme. Wherever Sandwich terns breed, they are reliant on marine habitats for food, primarily small surface-feeding fish within 15 km of the nest site. The effects of availability of fish in relation to tern productivity are poorly understood, but over-fishing and the impacts of climate change are likely to have a significant effect. |

| Priority species | Champion | Status | 2025 target | Rationale |
|---------------------------------------|--------------------------------|---|--|---|
| Water Vole | Kent Wildlife Trust | <p>The water vole is Britain's fastest declining mammal. Despite continued conservation efforts, the latest analysis of data undertaken by the National Water Vole Database and Mapping Project estimates the ongoing overall decline of this species was 30% between 2006 and 2015 across England and Wales.</p> <p>Water vole populations in Kent are now largely concentrated within the county's extensive coastal and floodplain grazing marshes which feature complex habitats including ditch networks and reedbeds.</p> | To retain water vole populations on all known sites and demonstrate progress in assessing county-specific status through encouraging involvement in the National Water Vole Monitoring Programme (evidenced by all existing sites being monitored and the addition of new sites to the register). This will enable subsequent assessment of the population across Kent and enable specific actions to be identified. | <p>Water vole populations in Kent are of national importance, with the county home to 3 National Key Sites at Elmley, the North Kent Marshes and Stodmarsh.</p> <p>Water voles are an excellent indicator of landscape connectivity. Water voles are also ecological engineers, enhancing habitat heterogeneity through their burrowing and grazing activities creating rich bankside environments capable of supporting a wide variety of insects, other small mammals (inc. bats), reptiles and amphibians.</p> <p>People's Trust for Endangered Species (PTES) established the National Water Vole Monitoring Programme in 2015. KNP partners and others can raise awareness of this scheme.</p> |
| True Fox-sedge (Carex vulpine) | Kent Botanical Recording Group | A rare plant whose Low Weald populations in Kent are of national significance. | Update monitoring data for this species, with a view to verifying any decline and what management action might appropriately address this (e.g. by managing the invasive growth of trees and scrub around pond and ditch margins). | A rare plant of Low Wealden ditch and waterbody margins. Ponds and ditches are a defining feature of the Low Weald and if attention is given to this species, then it is likely that other Wealden wetland species will be encouraged, to the benefit of biodiversity. |

MARINE HABITATS AND SPECIES

| Priority habitat | Champion | Current resource (Kent Habitat Survey 2012 ⁴) | 2025 target | Rationale |
|--|----------|---|---|---|
| Intertidal chalk and subtidal chalk (nominated) | TBC | 1145.58 ha (total current mapped extent of SAC designated chalk reef) | To identify suitable locations and establish scientific reference areas for specific areas of chalk reef (by 2022). | There are currently no reference areas and so this will be done along the lines of the Education Conservation Areas that have been established by the Sussex IFCA in the Beachy Head West Marine Conservation Zone. These have been designed as intertidal gathering no-take zones, which provide a valuable education resource and improved understanding of the populations of species in areas where there is no gathering. |
| Subtidal mud (nominated) | TBC | TBC | TBC | The subtidal mud across Hythe Bay harbours a rare and very rich community of burrowing spoonworms, large shrimps and other animals, that supports fish populations which are commercially important to local fishing fleets. There is a recognised gap in the MPA network in the south east for subtidal mud, and surveys in 2012 showed that some of the key burrowing species have declined since the 1980s. Work with local stakeholders is needed to identify ways to ensure this rare community is able to persist in the Bay. |

| Indicator species | Champion | Status | Indicator measure | Rationale |
|-------------------------------|------------------------------|---|--|--|
| Harbour and Grey Seals | Zoological Society of London | Widespread across the Greater Thames Estuary. In Kent, the Greater Thames Estuary includes the coastline from Gravesend to Deal, sandbanks and Medway and Swale estuaries. Populations of both species for the entire Greater Thames Estuary appear to be increasing. | Harbour and grey seal population estimates for Greater Thames Estuary. | Harbour and grey seals are monitored annually (where funding allows) by aerial surveys covering the Greater Thames Estuary. The surveys consistently take place during the first two weeks of August to coincide with the harbour seal moult when more animals will be reliably ashore for counting. Counts are converted to population estimates. These estimates contribute to a long-term dataset that allows for seal population trends to be monitored. Seals are helpful indicators of general and wider estuarine health including habitat and prey availability. |

APPENDIX 2

PRIORITY HABITATS – BASELINE FIGURES

There are 36 habitat types that are in need of conservation and recovery in Kent and Medway and in Kent's waters, all of which are nationally important and some of which are rare and threatened on a global scale.

Many of the habitats listed below were not selected for inclusion within the main targets for this iteration of the Strategy because there are currently limited

opportunities for what can be achieved, either through partnership working or through the constraints pertaining to that particular habitat type. Nevertheless, partners will continue to undertake work to manage, enhance, extend and reconnect these habitats, where feasible. The Kent Nature Partnership may decide in years to come to select new priority habitats from those listed below if the latter require greater focus and work.

| Priority Habitat | Current UK BAP habitat resource (Kent Habitat Survey 2012) ⁴² unless otherwise indicated |
|---|--|
| Arable field margins | 2751 ha ⁴³ – not recorded during 2012 KHS. |
| Blue mussel beds on sediment | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Coastal and floodplain grazing marsh | 14,174 ha |
| Coastal saltmarsh | 1338 ha |
| Coastal sand dunes | 455 ha |
| Coastal vegetated shingle | 2104 ha |
| Fragile sponge and anthozoan communities on subtidal rocky habitats | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Hedgerows | Approx. 11,734 km (including but not limited to BAP habitat type hedgerow) ⁴⁴ |
| Honeycomb worm (<i>Sabellaria alveolata</i>) reefs | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Intertidal chalk / Subtidal chalk | 415 ha / Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Intertidal mudflats | 10,078 ha |
| Intertidal underboulder communities | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Lowland beech and yew woodland | 613 ha |
| Lowland calcareous grassland | 1159 ha |
| Lowland dry acid grassland | 262 ha |
| Lowland fen | 12 ha |
| Lowland heathland / Purple moor grass and rush pasture | 74 ha / 11 ha |
| Lowland meadow | 27 ha |

| | |
|--|---|
| Lowland mixed deciduous woodland | 153 ha |
| Maritime cliffs and slopes | 221 ha |
| Mud habitats in deep water (?) | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Open mosaic habitats on previously developed land | Baseline data not available |
| Peat and clay exposures with piddocks | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Ponds | Baseline data not available |
| Reedbeds | 545 ha |
| Rivers | Current resource: 6592 ha. No recorded areas of UK BAP priority or Annex1 habitats within KHS 2012. |
| Rossworm (<i>Sabellaria spinulosa</i>) reefs | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Saline lagoons | 286 ha |
| Seagrass beds | 29 ha |
| Sheltered muddy gravels / Subtidal sands and gravels | 9 ha / Baseline data for 'Subtidal sands and gravels' not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Spoonworms and burrowing megafauna | Baseline data not currently available as extremely costly to identify spatial extent of subtidal habitats |
| Traditional orchard | 1676 ha |
| Wet woodland | 662 ha |
| Wood pasture and parkland | 3176 ha |

APPENDIX 3

PRIORITY SPECIES

There have been 387 priority species recorded in Kent (UK species identified as being the most threatened and requiring conservation action); these are listed below. It should be noted that whilst recorded in Kent, not all are necessarily still present in the county; but all priority species recorded serves to illustrate not only how rich our environment is but how rich it indeed has been and could be, and provides inspiration for projects to see their return to the county.

| Latin name | Common name |
|--------------------------------|--------------------------------|
| Aceras anthropophorum | Man Orchid |
| Acronicta psi | Grey Dagger (moth) |
| Acronicta rumicis | Knot Grass |
| Adonis annua | Pheasant's Eye (plant) |
| Adscita statices | Forester (moth) |
| Agabus brunneus | Brown Diving Beetle |
| Agonopterix capreolella | Fuscous Flat-body (moth) |
| Agonum scitulum | Agonum scitulum (beetle) |
| Agrochola helvola | Flounced Chestnut (moth) |
| Agrochola litura | Brown-spot Pinion (moth) |
| Agrochola lychnidis | Beaded Chestnut (moth) |
| Agroeca cuprea | Golden Lantern (spider) |
| Agrotera nemoralis | Beautiful Pearl (moth) |
| Ajuga chamaepitys | Ground-Pine |
| Aleucis distinctata | Sloe Carpet (moth) |
| Allophyes oxyacanthae | Green-brindled Crescent (moth) |

| Latin name | Common name |
|----------------------------------|-----------------------------------|
| Ammodytes marinus | Raitt's Sand eel |
| Ammodytes tobianus | Sand eel |
| Ampedus rufipennis | Red-horned Cardinal Click Beetle |
| Amphipoea oculea | Ear Moth |
| Amphipyra tragopoginis | Mouse Moth |
| Anaciaeschna isoceles | Norfolk Hawker (dragonfly) |
| Anania funebris | White-spotted Sable (moth) |
| Andrena ferox | Oak Mining Bee |
| Andrena tarsata | Tormentil Mining Bee |
| Anergates atratulus | Dark Guest Ant |
| Anguilla anguilla | European Eel |
| Anguis fragilis | Slow-worm |
| Anisodactylus poeciloides | Saltmarsh Short-spur (beetle) |
| Anisus vorticulus | Little Whirlpool Ram's-horn Snail |
| Anthophora retusa | Potter Flower Bee |
| Apamea anceps | Large Nutmeg (moth) |

| Latin name | Common name |
|--|-----------------------------------|
| Apamea remissa | Dusky Brocade (moth) |
| Aplasta ononaria | Rest Harrow (moth) |
| Aporophyla lutulenta | Deep-Brown Dart (moth) |
| Arabis glabra | Tower Mustard |
| Archanara neurica | White-mantled Wainscot (moth) |
| Arctia caja | Garden Tiger (moth) |
| Arctosa fulvolineata | Yellow-striped Bear-spider |
| Argynnis adippe | High Brown Fritillary (butterfly) |
| Artemisia campestris | Field Mugwort |
| Arvicola amphibius | European Water Vole |
| Arvicola terrestris | Water Vole |
| Asilus crabroniformis | Hornet Robberfly |
| Asparagus officinalis subsp. prostratus | Wild Asparagus |
| Aspitates gilvaria gilvaria | Straw Belle (moth) |
| Asteroscopus sphinx | Sprawler (moth) |
| Atethmia centrago | Centre-barred Sallow (moth) |
| Atrichum angustatum | Lesser Smoothcap (plant) |
| Austropotamobius pallipes | White-clawed Freshwater Crayfish |
| Bacidia incompta | (lichen) |
| Baetis niger | Southern Iron Blue (mayfly) |
| Balaenoptera acutorostrata | Minke Whale |
| Balaenoptera physalus | Fin Whale |
| Barbastella barbastellus | Western Barbastelle (bat) |
| Baryphyma duffeyi | Duffey's Bell-head Spider |
| Battarraea phalloides | Sandy Stiltball (fungus) |

| Latin name | Common name |
|-----------------------------------|---|
| Bembecia chrysidiformis | Fiery Clearwing (moth) |
| Bembidion argenteolum | Silt Silver-spot (beetle) |
| Bembidion quadripustulatum | Scarce Four-dot Pin-palp (beetle) |
| Blepharita adusta | Dark Brocade (moth) |
| Blysmus compressus | Flat-sedge |
| Boloria euphrosyne | Pearl Bordered Fritillary (butterfly) |
| Boloria selene | Small Pearl-bordered Fritillary (butterfly) |
| Bombus humilis | Brown-Banded Carder Bee |
| Bombus muscorum | Moss Carder Bee |
| Bombus ruderarius | Red-shanked Carder Bee |
| Bombus ruderatus | Large Garden Bumble Bee |
| Bombus subterraneus | Short Haired Bumble Bee |
| Bombus sylvarum | Shrill Carder Bee |
| Bombylius minor | Heath Bee-fly |
| Brachylochia viminalis | Minor Shoulder-Knot (moth) |
| Bromus interruptus | Interrupted Brome (plant) |
| Bryum gemmiparum | Welsh Thread-moss |
| Bryum warneum | Warne's Thread-moss |
| Bufo bufo | Common Toad |
| Bupleurum rotundifolium | Thorow-wax (plant) |
| Bupleurum tenuissimum | Slender Hare's-ear (plant) |
| Byctiscus populi | Poplar Leaf-rolling Weevil |
| Caloplaca aractina | Placodium fuscoatrum (lichen) |
| Caloplaca flavorubescens | Caloplaca flavorubescens (lichen) |
| Caloplaca luteoalba | Orange-fruited Elm-lichen |
| Campanula rapunculus | Rampion Bellflower |

| Latin name | Common name |
|-----------------------------------|--------------------------------|
| Campsicnemus magius | Fancy-legged Fly |
| Carabus monilis | Necklace Ground Beetle |
| Caradrina morpheus | Mottled Rustic (moth) |
| Carex divisa | Divided Sedge |
| Carex ericetorum | Rare Spring-Sedge |
| Carex vulpina | True Fox-Sedge |
| Carum carvi | Caraway |
| Catocala promissa | Light Crimson Underwing (moth) |
| Catocala sponsa | Dark Crimson Underwing (moth) |
| Celaena haworthii | Haworth's Minor (moth) |
| Celaena leucostigma | Crescent (moth) |
| Centaurea calcitrapa | Red Star-thistle |
| Centaurea cyanus | Cornflower |
| Cephalanthera damasonium | White Helleborine |
| Cephalanthera longifolia | Narrow-Leaved Helleborine |
| Cephaloziella baumgartneri | Chalk Threadwort |
| Ceramica pisi | Broom Moth |
| Cerceris quadricincta | Four-banded Weevil-wasp |
| Cerceris quinquefasciata | Five-banded Weevil-wasp |
| Cetorhinus maximus | Basking Shark |
| Chamaemelum nobile | Chamomile |
| Chara connivens | Convergent Stonewort |
| Chenopodium urbicum | Upright Goosefoot (plant) |
| Chenopodium vulvaria | Stinking Goosefoot (plant) |
| Chesias legatella | Streak (moth) |
| Chesias rufata | Broom-Tip (moth) |

| Latin name | Common name |
|---------------------------------|-------------------------------|
| Chiasmia clathrata | Latticed Heath (moth) |
| Chlaenius tristis | Black Night-runner (beetle) |
| Chlorita viridula | Sea-wormwood Leafhopper |
| Chrysis fulgida | Shimmering Ruby-tail (wasp) |
| Clinopodium acinos | Basil Thyme |
| Clupea harengus | Herring |
| Coenonympha pamphilus | Small Heath (butterfly) |
| Colletes halophilus | Sea Aster Bee |
| Cosmia diffinis | White-Spotted Pinion (moth) |
| Cossus cossus | Goat Moth |
| Crepis foetida | Stinking Hawk's-beard (plant) |
| Crepis mollis | Northern Hawk's-beard (plant) |
| Cryptocephalus coryli | Hazel Pot Beetle |
| Cryptocephalus punctiger | Blue Pepper-pot Beetle |
| Cupido minimus | Small Blue (butterfly) |
| Cyclodictyon laetevirens | Bright Green Cave-Moss |
| Cyclophora porata | False Mocha (moth) |
| Cymatophorima diluta | Oak Lutestring (moth) |
| Cynoglossum germanicum | Green Hound's-tongue (plant) |
| Decticus verrucivorus | Wart-biter (cricket) |
| Delphinus delphis | Common Dolphin |
| Dermodochelys coriacea | Leathery Turtle |
| Dianthus armeria | Deptford Pink |
| Diarsia rubi | Small Square-spot (moth) |
| Dicranum undulatum | Waved Fork-moss |
| Dictyna pusilla | Small Mesh-weaver (spider) |

| Latin name | Common name |
|---------------------------------|---------------------------------|
| Diloba caeruleocephala | Figure of Eight (moth) |
| Doratura impudica | Large Dune Leafhopper |
| Dorycera graminum | Phoenix Fly |
| Dromius vectensis | Dromius vectensis (beetle) |
| Dryopteris cristata | Crested Buckler-fern |
| Ecliptopera silaceata | Small Phoenix (moth) |
| Ennomos erosaria | September Thorn (moth) |
| Ennomos fuscantaria | Dusky Thorn (moth) |
| Ennomos quercinaria | August Thorn (moth) |
| Entoloma bloxamii | Big Blue Pinkgill (fungus) |
| Epirrhoe galiata | Galium Carpet (moth) |
| Erinaceus europaeus | West European Hedgehog |
| Eryngium campestre | Field Eryngo (plant) |
| Erynnis tages | Dingy Skipper (butterfly) |
| Eucera longicornis | Long-horned Bee |
| Eugnorisma glareosa | Autumnal Rustic (moth) |
| Eulithis mellinata | Spinach |
| Euphrasia anglica | Eyebright |
| Euphrasia anglica | Small-flowered Sticky Eyebright |
| Euphrasia pseudokernerii | Eyebright |
| Eurysa douglasi | Chalk Planthopper |
| Euxoa nigricans | Garden Dart (moth) |
| Euxoa tritici | White-line Dart (moth) |
| Fallopia dumetorum | Copse-Bindweed |
| Filago lutescens | Red-Tipped Cudweed |
| Filago pyramidata | Broad-Leaved Cudweed |

| Latin name | Common name |
|---------------------------------|---------------------------------|
| Formicoxenus nitidulus | Shining Guest Ant |
| Gadus morhua | Atlantic Cod |
| Galeopsis angustifolia | Red Hemp-nettle |
| Galeorhinus galeus | Tope Shark |
| Galium pumilum | Slender Bedstraw |
| Galium tricornutum | Corn Cleavers (plant) |
| Gentianella anglica | Early Gentian |
| Gentianella campestris | Field Gentian |
| Globicephala melaena | Pilot Whale |
| Gnorimus nobilis | Noble Chafer (beetle) |
| Grampus griseus | Risso's dolphin |
| Graphiphora augur | Double Dart (moth) |
| Grapholita pallifrontana | Liquorice Piercer (moth) |
| Gryllotalpa gryllotalpa | Mole Cricket |
| Hadena albimacula | White Spot (moth) |
| Haliclystus auricula | Stalked Jellyfish |
| Hamearis lucina | Duke of Burgundy (butterfly) |
| Haplodrassus dalmatensis | Heath Grasper (spider) |
| Harpalus punctatulus | Set-aside Downy-back (beetle) |
| Heleobia stagnorum | Lagoon Spire Snail |
| Heliophobus reticulata | Bordered Gothic (moth) |
| Hemaris tityus | Narrow-Bordered Bee Hawk (moth) |
| Hemistola chrysoprasaria | Small Emerald (moth) |
| Hepialus humuli | Ghost Moth |
| Hericium coralloides | Coral Tooth (fungus) |
| Hericium erinaceus | Bearded Tooth (fungus) |

| Latin name | Common name |
|--|-----------------------------|
| Herminium monorchis | Musk Orchid |
| Hipparchia semele | Grayling (butterfly) |
| Hippocampus hippocampus | Short-snouted Seahorse |
| Hohenbuehelia culmicola | Marram Oyster |
| Hoplodrina blanda | Rustic (moth) |
| Hordeum marinum | Sea Barley |
| Hydnellum conrescens | Zoned Tooth (fungus) |
| Hydnellum ferrugineum | Mealy Tooth (fungus) |
| Hydnellum scrobiculatum | Ridged Tooth (fungus) |
| Hydnellum spongiosipes | Velvet Tooth (fungus) |
| Hydraecia micacea | Rosy Rustic |
| Hydraecia osseola subsp. hucherardi | Marsh Mallow Moth |
| Hydrometra gracilentia | Lesser Water Measurer |
| Hydroporus rufifrons | Oxbow Diving Beetle |
| Iberis amara | Wild Candytuft |
| Idaea dilutaria | Silky Wave (moth) |
| Idaea ochrata subsp. cantiata | Bright Wave (moth) |
| Illecebrum verticillatum | Coral Necklace (plant) |
| Juniperus communis | Juniper |
| Lacerta agilis | Sand Lizard |
| Lactuca saligna | Least Lettuce |
| Lagenorhynchus albirostris | White-Beaked Dolphin |
| Lasiommata megera | Wall Brown (butterfly) |
| Lecania chlorotiza | Lecania chlorotiza (lichen) |
| Lecidea erythrophaea | Lecidea minuta (lichen) |

| Latin name | Common name |
|--------------------------------------|--|
| Leptidea sinapis | Wood White (butterfly) |
| Leptothorax interruptus | Long-spined Ant |
| Lepus europaeus | Brown Hare |
| Limenitis camilla | White Admiral (butterfly) |
| Lipsothrix nervosa | Southern Yellow Splinter (cranefly) |
| Lithostege griseata | Grey Carpet (moth) |
| Lolium temulentum | Darnel |
| Lucanus cervus | Stag Beetle |
| Lucernariopsis campanulata | Lucernariopsis campanulate (stalked jellyfish) |
| Lucernariopsis cruxmelitensis | St. John's Jellyfish |
| Lutra lutra | European Otter |
| Lycia hirtaria | Brindled Beauty (moth) |
| Lymnaea glabra | Mud Snail |
| Lythrum hyssopifolium | Grass Poly |
| Malachius aeneus | Scarlet Malachite Beetle |
| Malacosoma neustria | Lackey (moth) |
| Megalospora tuberculosa | Lecidea tuberculosa (lichen) |
| Meioneta mollis | Thin Weblet (spider) |
| Melampyrum cristatum | Crested Cow-Wheat |
| Melanchra persicariae | Dot Moth |
| Melanotus punctolineatus | Sandwich Click Beetle |
| Melanthia procellata | Pretty Chalk Carpet (moth) |
| Melittis melissophyllum | Bastard Balm (plant) |
| Mellicta athalia | Heath Fritillary (butterfly) |
| Meloe proscarabaeus | Black Oil-beetle |
| Meloe rugosus | Rugged Oil-beetle |

| Latin name | Common name |
|--|----------------------------------|
| Meloe violaceus | Violet Oil-beetle |
| Mentha pulegium | Pennyroyal |
| Merlangius merlangus | Whiting |
| Mesoligia literosa | Rosy Minor (moth) |
| Metaiulus pratensis | Kentish Snake Millipede |
| Microglossum olivaceum | Olive Earthtongue (fungus) |
| Micromys minutus | Harvest Mouse |
| Minoa murinata | Drab Looper (moth) |
| Minuartia hybrida | Fine-leaved Sandwort |
| Molva molva | Ling |
| Monocephalus castaneipes | Broad Groove-head Spider |
| Monotropa hypopitys | Yellow Bird's-nest |
| Monotropa hypopitys subsp. hypophegea | Bird's-nest |
| Muscardinus avellanarius | Hazel Dormouse |
| Muscari neglectum | Grape-hyacinth |
| Mustela putorius | Polecat |
| Myotis bechsteinii | Bechstein's Bat |
| Myriostoma coliforme | Pepper Pot (fungus_ |
| Mythimna comma | Shoulder-striped Wainscot (moth) |
| Natrix helvetica | Grass Snake |
| Natrix natrix | Grass Snake |
| Nemophora fasciella | Horehound Long-horn (moth) |
| Neotinea ustulata | Burnt Orchid |
| Noctua orbona | Lunar Yellow Underwing (moth) |
| Nomada armata | Armed Nomad Bee |

| Latin name | Common name |
|--|---|
| Nyctalus noctula | Noctule Bat |
| Odynerus melanocephalus | Black Headed Mason Wasp |
| Oenanthe fistulosa | Tubular Water-dropwort |
| Opegrapha prosodea | Opegrapha prosodea (lichen) |
| Ophonus (Metoponus) melletii | Mellet's Downy-back (beetle) |
| Ophonus (Metoponus) puncti-collis | Ophonus (Metoponus) puncticollis (beetle) |
| Ophrys insectifera | Fly Orchid |
| Orchestes (Orchestes) testaceus | Alder Flea Weevil |
| Orchis simia | Monkey Orchid |
| Orcinus orca | Killer Whale |
| Orobanche picridis | Oxtongue Broomrape |
| Orthodontium gracile | Slender Thread-moss |
| Orthonama vittata | Oblique Carpet (moth) |
| Orthosia gracilis | Powdered Quaker (moth) |
| Osmerus eperlanus | Smelt |
| Osmia (Melanosmia) xanthomelana | Cliff Mason Bee |
| Ostrea edulis | European oyster |
| Ozyptila nigrita | Southern Crablet |
| Pallavicinia lyellii | Ribbonwort |
| Paracolax tristalis | Clay Fan-foot (moth) |
| Pareulype berberata | Barberry Carpet (moth) |
| Pechipogon strigilata | Common Fan-foot (moth) |
| Pelurga comitata | Dark Spinach |
| Perizoma albulata albulata | Grass Rivulet |
| Phellodon confluens | Fused Tooth (fungus) |

| Latin name | Common name |
|-----------------------------------|--|
| Phellodon melaleucus | Grey Tooth (fungus) |
| Phellodon niger | Black Tooth (fungus) |
| Phellodon tomentosus | Woolly Tooth (fungus) |
| Philodromus fallax | Sand Running-spider |
| Philodromus margaritatus | Lichen Running-spider |
| Philorhizus vectensis | Philorhizus vectensis (beetle) |
| Phoca vitulina | Common Seal |
| Phocoena phocoena | Harbour Porpoise |
| Pholiota astragalina | Conifer Scalycap (fungus) |
| Photedes extrema | Concolorous (moth) |
| Phyllonorycter sagitella | Scarce Aspen Midget (moth) |
| Phyllonorycter scabiosella | Surrey Midget (moth) |
| Phylloporus pelletieri | Gilled Bolete (fungus) |
| Physeter catodon | Sperm Whale |
| Pipistrellus pygmaeus | Soprano Pipistrelle (bat) |
| Piptoporus quercinus | Oak Polypore (fungus) |
| Platanthera bifolia | Lesser Butterfly-Orchid |
| Plecotus auritus | Brown Long-eared Bat |
| Pleuronectes platessa | Plaice |
| Podoscypha multizonata | Zoned Rosette (fungus) |
| Polia bombycina | Pale Shining Brown (moth) |
| Polyzonium germanicum | Boring Millipede |
| Potamogeton acutifolius | Sharp-Leaved Pondweed |
| Pseudanodonta complanata | Depressed (or Compressed) River Mussel |
| Pseudeuophrys obsoleta | Whelk-shell Jumper (spider) |
| Pseudorchis albida | Small-White Orchid |

| Latin name | Common name |
|------------------------------------|-------------------------------------|
| Puccinellia fasciculata | Borrer's Saltmarsh-grass |
| Pulsatilla vulgaris | Pasqueflower |
| Pyrenula nitida | Pyrenula nitida (lichen) |
| Pyrgus malvae | Grizzled Skipper (butterfly) |
| Raja batis | Skate |
| Raja undulata | Undulate Ray |
| Ranunculus arvensis | Corn Buttercup |
| Ranunculus tripartitus | Three-lobed Water-crowfoot |
| Rhizedra lutosa | Large Wainscot (moth) |
| Rhytidiadelphus subpinnatus | Scarce Turf-moss |
| Saaristoia firma | Triangle Hammock-spider |
| Salmo trutta | Sea Trout |
| Salsola kali subsp. kali | Prickly Saltwort |
| Sarcodon scabrosus | Bitter Tooth (fungus) |
| Sarcodon squamosus | Scaly Tooth (fungus) |
| Sarcodontia crocea | Orchard Tooth (fungus) |
| Sarcosphaera coronaria | Violet Crowncup (fungus) |
| Satyrium w-album | White-letter Hairstreak (butterfly) |
| Scandix pecten-veneris | Shepherd's-needle (plant) |
| Schoenoplectus triqueter | Triangular Club-rush |
| Sciota hostilis | Scarce Aspen Knot-horn (moth) |
| Scirpoides holoschoenus | Round-headed Club-rush |
| Sciurus vulgaris | Eurasian Red Squirrel |
| Scleranthus annuus | Annual Knawel |
| Scomber scombrus | Mackerel |
| Scopula marginepunctata | Mullein Wave (moth) |

| Latin name | Common name |
|--|--------------------------------|
| Scotopteryx bipunctaria | Chalk Carpet (moth) |
| Scotopteryx chenopodiata | Shaded Broad-bar (moth) |
| Segmentina nitida | The Shining Ram's-horn (snail) |
| Semiothisa wauaria | V-Moth |
| Silene gallica | Small-flowered Catchfly |
| Siona lineata | Black-veined Moth |
| Sitticus caricis | Sedge Jumper (spider) |
| Sitticus distinguendus | Distinguished Jumper (spider) |
| Sium latifolium | Greater Water-parsnip |
| Solea solea | Dover Sole |
| Spartina maritima | Small Cord-grass |
| Spilosoma lubricipeda | White Ermine (moth) |
| Spilosoma luteum | Buff Ermine (moth) |
| Stellaria palustris | Marsh Stitchwort |
| Stigmella zelleriella | Sandhill Pigmy (moth) |
| Stilbia anomala | Anomalous (moth) |
| Tapinoma erraticum | Erratic Ant |
| Tephrosieris integrifolia subsp. integrifolia | Field Fleawort |
| Thalera fimbrialis | Sussex Emerald (moth) |
| Thecla betulae | Brown Hairstreak (butterfly) |
| Tholera decimalis | Feathered Gothic (moth) |
| Timandra comae | Blood-vein (moth) |
| Torilis arvensis | Spreading Hedge-parsley |
| Tortula vahliana | Chalk Screw-moss |
| Trachurus trachurus | Scad (fish) |

| Latin name | Common name |
|---------------------------------|-------------------------------------|
| Trichiura crataegi | Pale Eggar (moth) |
| Trichopteryx polycommata | Barred Tooth-Striped (moth) |
| Trisateles emortualis | Olive Crescent (moth) |
| Triturus cristatus | Great Crested Newt |
| Tursiops truncatus | Bottle-Nosed Dolphin |
| Tyria jacobaeae | Cinnabar moth |
| Tyta luctuosa | Four-Spotted (moth) |
| Usnea articulata | Usnea articulate (lichen) |
| Usnea florida | Witches' Whiskers Lichen |
| Veronica triphyllos | Fingered Speedwell |
| Vertigo moulinsiana | Desmoulin's Whorl Snail |
| Vipera berus | Adder |
| Watsonalla binaria | Oak Hook-tip (moth) |
| Weissia sterilis | Sterile Beardless-moss |
| Weissia tortilis | Curly Beardless-moss |
| Xanthia gilvago | Dusky-Lemon Sallow (moth) |
| Xanthia icteritia | Sallow (moth) |
| Xanthorhoe ferrugata | Dark-Barred Twin-Spot Carpet (moth) |
| Xestia agathina | Heath Rustic (moth) |
| Xestia castanea | Neglected Rustic (moth) |
| Zootoca vivipara | Common Lizard |

APPENDIX 4

SOUTH EAST STRATEGIES AND PLANS OF RELEVANCE TO THE KENT BIODIVERSITY STRATEGY

[South East Local Enterprise Partnership Economic Plan](#)
[South East Industrial Strategy](#)
[South East Tri-LEP Energy Strategy](#)
[South East Clean Growth Strategy](#)

KENT STRATEGIES AND PLANS OF RELEVANCE TO THE KENT BIODIVERSITY STRATEGY

[Kent Downs AONB Management Plan](#)
[High Weald AONB Management Plans](#)
[Kent Environment Strategy](#)
[NE Kent European Marine Sites Management Scheme](#)
[South East Marine Plan](#)

[Ashford Borough Council Local Plan](#)
[Canterbury City Council Local Plan](#)
[Dartford Borough Council Local Plan](#)
[Dover District Council Local Plan](#)
[Folkestone and Hythe District Council Local Plan](#)
[Gravesham Borough Council Local Plan](#)
[Maidstone Borough Council Local Plan](#)
[Medway Council Local Plan](#)
[Sevenoaks District Council Local Plan](#)
[Swale Borough Council Local Plan](#)
[Thanet District Council Local Plan](#)
[Tonbridge and Malling Borough Council Local Plan](#)

[Tunbridge Wells Borough Council Local Plan](#)
[Kent and Medway Growth and Infrastructure Framework](#)
[Local Transport Plan](#)
[Rights of Way Improvement Plan](#)
[Active Travel Strategy](#)
[Joint Strategic Needs Assessment](#)
[Kent Joint Health and Wellbeing Strategy](#)
[Kent Housing Group](#)
[Kent and Medway Energy and Low Emissions Strategy](#)
[Ash die back Plan](#)
[Local Flood Risk Management Strategy](#)
[Shoreline Management Plan 9 River Medway & Swale Estuary](#)
[Shoreline Management Plan 10 Isle of Grain to South Foreland](#)
[Shoreline Management Plan 11 South Foreland to Beachy Head](#)
[Kent's River Basin Management Plans](#)
[Kent Climate Change Risk and Impact Assessment](#)

APPENDIX 5

GLOSSARY

BIODIVERSITY

As defined in the Defra Biodiversity Strategy 2020, biodiversity is the diversity, or variety, of plants, animals and other living things in a particular area or region. It encompasses habitat diversity, species diversity and genetic diversity.

BIODIVERSITY NET GAIN

Biodiversity Net Gain is development that leaves biodiversity in a better state than before.⁴⁵

CHAMPION FOR PRIORITY HABITATS

The role of Champion is defined by the KNP as follows:

- Act as main point of contact for that priority habitat.
- Review and agree the rationale for the targets (consulting with any other key/relevant partners and/or stakeholders).
- Review and agree the targets (consulting with any other key/relevant partners and/or stakeholders).
- Review and agree the baseline figure and source from which it is derived.
- Be prepared to report on progress against that target, collecting relevant data from partners (every two years).
- Assist in preparing information as relevant for the district information on that particular priority habitat.
- Ideally be selected as champion because they are an agency/organisation with either statutory or other responsibility/interest for that particular priority habitat i.e. already well linked in to its protection, restoration and/or creation.

ECOLOGICAL NETWORK

'...an ecological network comprises a suite of high quality sites which collectively contain the diversity and area of habitat that are needed to support species and which have ecological connections between them...'⁴⁶

ECOSYSTEM

An ecosystem includes all of the living things (plants, animals, and organisms) in a given area that interact with each other, as well as the non-living environments (weather, earth, sun, soil, climate, atmosphere) that surround the living things.⁴⁷

ECOSYSTEM SERVICE

The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual, recreational, and cultural benefits; and supporting services such as nutrient cycling that maintain the conditions for life on Earth.⁴⁸

ENVIRONMENTAL NET GAIN

A development that enhances biodiversity and natural capital could be considered to be delivering environmental net gains.⁴⁹

GREEN INFRASTRUCTURE (GI)

Green Infrastructure is a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types.

Green Infrastructure includes established green spaces and new sites and should thread through and surround the built environment and connect the urban area to its wider rural hinterland. Consequently it needs to be delivered at all spatial scales from sub-regional to local neighbourhood levels, accommodating both accessible natural green spaces within local communities and often much larger sites in the urban fringe and wider countryside.⁵⁰

HIGH VALUE HABITAT

Within the context of the Kent Nature Partnership Biodiversity Strategy, 'high value' refers to land which is designated as SSSI, SPA, SAC, LWS; ancient semi-natural woodland as identified within Natural England's Ancient Woodland Inventory; all BAP priority habitats; and land in the Higher Level/Tier/Countryside Stewardship schemes with Maintain/Manage or Restore options.

LOCAL WILDLIFE SITES (LWS)

A suite of semi-natural habitats that have been recognised for their wildlife importance. While they are not protected by statutory conservation designations, they are often just as rich in wildlife value. Occupying a significant area (7%) of Kent, they collectively contain some of the most important, distinctive and threatened species and habitats within a national, regional and local context. Furthermore, and importantly, they act as stepping stones between surrounding areas, providing a crucial opportunity for connecting habitats which otherwise would be isolated and unable to support viable populations of wildlife. Local Wildlife Sites therefore provide vital support to the plants and animals occurring in our gardens, parks and protected areas, are an important component of the county's ecological network and provide critical ecosystem services which benefit the people of Kent.

NATIONAL PLANNING POLICY FRAMEWORK (NPPF)

The National Planning Policy Framework set out government's planning policies for England and how these are expected to be applied. It provides guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications.

NATURAL CAPITAL

The air, water, soil and ecosystems that support all forms of life, including natural assets such as forests, rivers, land, minerals and oceans.

NATURAL HABITAT

Natural habitats retain ecological assemblages, functions and species composition that are attributable to natural evolutionary processes and have not been substantially modified by human activities. Truly natural and unaltered habitats are increasingly rare and those that remain are likely to be a high priority for conservation.⁵¹

PRIORITY HABITAT

UK BAP priority habitats were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original list of UK BAP priority habitats was created between 1995 and 1999, and was revised in 2007, following publication of the Species and Habitats Review Report. Following this review, the list of UK BAP priority habitats increased from 49 to 65. As a result of devolution, and new country-level and international drivers and requirements, much of the work previously carried out by the UK BAP is now focussed at a country-level rather than a UK-level, and the UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in July 2012. The UK list of priority habitats, however, remains an important reference source and has been used to help draw up statutory lists of priority habitats which, in England, was required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2016.⁵²

Regenerative Agriculture is a system of farming principles and practices that increases biodiversity, enriches soils, improves watersheds, and enhances ecosystem services. It aims to capture carbon in soil and aboveground biomass, reversing current global trends of atmospheric accumulation. At the same time, it offers increased yields, resilience to climate instability, and higher health and vitality for farming and ranching communities. The system draws from decades of scientific and applied research by the global communities of organic farming, agroecology, Holistic Management, and agroforestry (<http://www.regenerativeagriculturedefinition.com/>). Regenerative agriculture practices restore landscape function, increase nutrient and water cycling and sequester carbon in the soil. These practices increase biodiversity, productivity and are

profitable and low risk while being personally sustainable for farmers and their communities and a significant ameliorant to climate change. Research has shown farm and family businesses using regenerative agriculture principles have similar levels of profit to traditional businesses but with lower risk. Family members have higher physical and mental wellbeing, and land that is healthier, with more ground cover (Mark Gardner, Vanguard Business Services, Australia).

SEMI-NATURAL HABITAT

Semi-natural habitats have ecological assemblages that have been substantially modified in their composition, balance or function by human activities. They may have evolved through traditional agricultural, pastoral or other human activities and depend on their continuation to retain their characteristic composition, structure and function. Despite not being natural, these habitats and ecosystems often have high value in terms of biodiversity and the services they provide⁵³. Examples might include most, if not all, of our Kent BAP priority habitats, but also other species-rich and semi-improved grasslands, recently planted broadleaved woodland and secondary woodland. It excludes habitats such as arable, improved grassland (rye grass) and coniferous woodland plantation.

APPENDIX 6

REFERENCES AND NOTES

- 1 https://www.wwf.org.uk/sites/default/files/2018-10/wwfintl_livingplanet_full.pdf
- 2 https://www.ipbes.net/news/Media-Release-Global-Assessment#_By_the_Numbers
- 3 <https://nbn.org.uk/stateofnature2019/reports/>
- 4 Facts and figures provided by Kent & Medway Biological Records Centre
- 5 Section 41 (S41) of 2006 Natural Environment and Rural Communities (NERC) Act
- 6 English Nature. 2001. North East Kent European marine sites Management Scheme.
- 7 From Butterfly Conservation data
- 8 Values taken from Securing the Value of Nature in Kent, 2011, David Pape and Jacklyn Johnson; and the UK Natural Capital Accounts 2019: Estimates of the financial and societal value of natural resources to people in the UK <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapitalaccounts/2019>
- 9 State of Nature Report 2019, <https://nbn.org.uk/stateofnature2019/reports/>
- 10 UK priority habitats were selected using one or more of the following criteria: for which the UK has international obligations; are at risk (rare or high rate of recent decline); functionally important for species inhabiting wider environments; and/or important for species of conservation concern.
- 11 UK species identified as being the most threatened and requiring conservation action.
- 12 State of Nature Report 2019, <https://nbn.org.uk/stateofnature2019/reports/>
- 13' Catchment Based Approach' (CaBA) is the current Defra initiative that facilitates catchment management and the restoration of rivers by grassroots groups, industry and government agencies.
- 4 Regenerative Agriculture is a system of farming principles and practices that increases biodiversity, enriches soils, improves watersheds, and enhances ecosystem services.
- 5 "Well managed/good management" in respect of this priority refers to: SSSIs in favourable or unfavourable recovering condition; SPAs/SACs with formal management plans or where potentially damaging activities are being managed; land parcels managed under options for Maintain/Manage or Restore under the Higher Level/Tier of an agri-environment/land management scheme; land in a Woodland Grant Scheme or which has a Forestry Commission Woodland Management Plan; LWS in management; NNRs, LNRs, RSPB, National Trust, KWT, Woodland Trust, Plantlife reserves.
- 16 In order to deliver net gain, we need to increase the proportion of existing semi-natural habitat in good management. In 2015, 20.84% of the county or 74,750 ha (total Kent area = 373,600 ha) was identified as high value, semi-natural habitat (for definitions of semi-natural and high value, please see Glossary). However, only two thirds of this was identified as high value and well-managed (in effect 14.6% of the county or 54,640 ha). The remaining 6.2% is either in poor management or status unknown.
- 17 20.84% (74,050 ha) of the county is high value, semi-natural habitat (for definitions, please see Glossary). In order to deliver net gain, we need to not only also increase the proportion of existing high value, semi-natural habitat in good management but to increase the extent of semi-natural habitat and improve connectivity. Current coverage of high and low value semi-natural habitat is estimated at 27%. A recent Kent Wildlife Trust review, the Landscape Scale Connectivity Literature Review (written in 2010 by Natural Values and commissioned by KWT) concluded that in order to provide the necessary ecological connectivity, the county should be aiming for a target of 30% of high and low value semi-natural habitat (112,000 ha). It is this long term (25 year) target that the KNP is aspiring towards, using as its basis the Biodiversity Opportunity Area mapping work which took place in 2008, was revised in 2014 and is due to be updated in 2019. In Kent, there are 98 SSSIs and over 466 Local Wildlife Sites alone, which together cover 15.7% of the county. However, there are also areas of ancient woodland and broadleaved

- woodland which fall outside any designation, but can be considered as a fairly secure wildlife habitat, so 30% is a less ambitious target than it seems. In addition, semi-natural habitats can include habitat which does not meet BAP priority habitat criteria, such as semi-improved grassland.
- 18 'Catchment Based Approach' (CaBA) is the current Defra initiative that facilitates catchment management and the restoration of rivers by grassroots groups, industry and government agencies.
- 19 Environment Agency. Wetlands: our role in their conservation and creation. Doc No 123_04. Version 3. Issued 09/09/2015
- 20 <http://www.wetlandvision.org.uk/userfiles/File/Technical%20Document%20Website%20Version.pdf>
- 20 "Well managed/good management" in respect of this priority refers to: SSSIs in favourable or unfavourable recovering condition; SPAs/SACs with formal management plans or where potentially damaging activities are being managed; land parcels managed under options for Maintain/Manage or Restore under the Higher Level/Tier of an agri-environment/land management scheme; land in a Woodland Grant Scheme or which has a Forestry Commission Woodland Management Plan; LWS in management; NNRs, LNRs, RSPB, National Trust, KWT, Woodland Trust, Plantlife reserves.
- 22 Any investment in waterbody improvements associated with river basin management planning will need to demonstrate that the benefits brought by carrying out the measures are proportionate to the costs.
- 23 The Water Framework Directive (WFD) requires that member states "implement the necessary measures to prevent deterioration of the status of all water bodies. ..." (Article 4.1). Water body status is based upon the assessed class of a range of variables known as 'elements', such as dissolved oxygen, macro invertebrates, fish, water balance, chemical tests, ...! All practicable action must be taken to prevent the deterioration in the status of individual elements of water bodies in England and Wales. Deterioration assessments are made of all elements as monitored and reported on by the Environment Agency following the Water Framework Directive guidelines. Element status at the start of each WFD cycle is used as the baseline against which deterioration is assessed. True deteriorations are determined by the Environment Agency and are set using baseline data from the beginning of each 6-year River basin management plan which commence: 2009, 2015, 2021 and 2027.
- 24 The length improved target presents a simple and meaningful indicator of the progress partners are making to improve the water environment. This measure complements the Water Framework Directive (WFD) classification status/potential. It covers all water body types (groundwater, river, lake, estuary and coast) and focusses on the length of water body enhanced in kilometres. The kilometres enhanced is from actions reported via publicly available information. The Environment Agency corporate scorecard measure, "the water environment is healthier", covers this objective. Kilometres enhanced does not take into account, or give, an environmental, economic or social benefit for the actions. An "enhancement" will result from action taken to reduce a known pressure/Reasons for Not Achieving Good status on the water environment by anyone, within the Environment Agency or externally, regardless of Environment Agency involvement or influence. The action must be a real physical change that will contribute towards achieving an agreed environmental objective.
- 25 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
- 26 Based on a 6 year cycle.
- 27 Baseline figures and measures of engagement with the natural environment are lacking currently. Compiling a baseline understanding against which to measure progress will be an action within the first five year implementation plan for the Strategy.
- 28 To be measured using Kent Environment Strategy indicator, based on Kent Environment Strategy public perceptions survey; measured at 18% in 2016.
- 29 In line with the 25 Year Environment Plan promoted national framework of green infrastructure standards.
- 30 To be measured using Kent Environment Strategy indicator, based on Kent Environment Strategy public perceptions survey; measured at 80% of residents using the natural environment at least once a fortnight and 55% using it at least once a week.
- 31 <http://www.archnature.eu/the-kent-habitat-survey-2012-final-report.html>. The Kent Habitat Survey provides the most comprehensive data regarding the extent of priority habitats in the county. However, the criteria for classifying habitat types as Priority Habitat (BAP) type were very strict and the data were not verified neither have they been updated since 2012.

- 32 Because no consistent methodology was in place, nor accurate survey data recorded in the 2003 Kent Habitat Survey, no like for like comparison is possible with the 2012 Kent Habitat Survey and extreme caution should be applied when using these targets. In 1995 there was estimated to be 1144 km of Species Rich and Ancient Hedgerow in Kent from a national survey by English Nature. This equated to some 0.9% of the total England resource, while Kent covers 2.8% of England's landmass. No reliable data from 2003 seems to exist or can be found. 2012 Kent Habitat Survey did not specifically survey for Species Rich and Ancient Hedgerows. It can be interpolated from habitat polygon data however that there are some 14,905 km of hedgerows and lines of trees habitat (combined) in Kent. Earlier studies from UKBAP in 2007 have determined that 42% of hedgerows may be Species Rich and Ancient. Therefore if just hedgerow data (LF11) are used this equates to 11734 km of hedgerow. 42% of that would be 4928 km so either the 1995 figure is wrong or the current methodology gives a falsely high result. That being said it is proposed that the targets are based around the 11734 km figure.
- 33 Gleed-Owen C. and Langham S. (2012) A conservation condition assessment of the adder (*Vipera berus*) in England, with recommendations for future monitoring and conservation policy. Report to Amphibian and Reptile Conservation. Pp 79.
- 34 Young, J S., Ryan, H., Thompson, S., Newcombe, M., and Puckett, J. (Eds.). (2015). Mammals of Kent. Published by Kent Mammal Group, Kent Bat Group, East Kent Badger Group and Kent Field Club.
- 35 <https://www.hedgehogstreet.org/wp-content/uploads/2018/02/Hedgehog-10-year-strategy-master-document-v5.pdf>
- 36 <http://www.kentbatgroup.org.uk/bats-in-kent/>
- 37 <http://www.archnature.eu/the-kent-habitat-survey-2012-final-report.html>. The Kent Habitat Survey provides the most comprehensive data regarding the extent of priority habitats in the county. However, the criteria for classifying habitat types as Priority Habitat (BAP) type were very strict and the data were not verified neither have they been updated since 2012.
- 38 There are no recorded areas of UK BAP priority or Annex1 habitats within the 2012 KHS as rivers and streams were not a target for this survey. This figure represents the extent of all running water in Kent.
- 39 Source Natural England 2019
- 40 <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:248:0017:0023:EN:PDF>
- 41 <http://www.legislation.gov.uk/ukxi/2009/3344/made>
- 42 <http://www.archnature.eu/the-kent-habitat-survey-2012-final-report.html>. The Kent Habitat Survey provides the most comprehensive data regarding the extent of priority habitats in the county. However, the criteria for classifying habitat types as Priority Habitat (BAP) type were very strict and the data were not verified neither have they been updated since 2012.
- 43 Habitat extent calculated from options in Environmental Stewardship agreements with start dates 2005-2010 and 2011-2013.
- 44 Because no consistent methodology was in place, nor accurate survey data recorded in the 2003 Kent Habitat Survey, no like for like comparison is possible with the 2012 Kent Habitat Survey and extreme caution should be applied when using these targets. In 1995 there was estimated to be 1144 km of Species Rich and Ancient Hedgerow in Kent from a national survey by English Nature. This equated to some 0.9% of the total England resource, while Kent covers 2.8% of England's landmass. No reliable data from 2003 seem to exist or can be found. 2012 Kent Habitat Survey did not specifically survey for Species Rich and Ancient Hedgerows. It can be interpolated from habitat polygon data however that there are some 14,905 km of hedgerows and lines of trees habitat (combined) in Kent. Earlier studies from UKBAP in 2007 have determined that 42% of hedgerows may be Species Rich and Ancient. Therefore if just hedgerow data (LF11) are used this equates to 11734 km of hedgerow. 42% of that would be 4928 km so either the 1995 figure is wrong or the current methodology gives a falsely high result. That being said it is proposed that the targets are based around the 11734 km figure.
- 45 <https://cieem.net/i-am/current-projects/biodiversity-net-gain/>
- 46 2010 report to Defra, 'Making Space for Nature: A review of England's wildlife sites and ecological network'
- 47 <https://www.maximumyield.com/definition/483/ecosystem>
- 48 UK National Ecosystem Assessment <http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/EcosystemServices/tabid/103/Default.aspx>
- 49 Defra Net Gain Consultation proposals December 2018

- 50 Natural England. (2009). Green Infrastructure Guidance. Catalogue Code NE176.
- 51 European Investment Bank Environmental and Social Standards: http://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en.pdf
- 52 <http://jncc.defra.gov.uk/page-5706>)
- 53 European Investment Bank Environmental and Social Standards: http://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en.pdf

APPENDIX 7

PHOTO CREDITS

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| Page 3 | Kent Country Parks | Page 15 | Old Chalk New Downs |
| Page 4 | Steve Smith | Page 16 | Explore Kent Old Chalk New Downs |
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NET ZERO 2030 UPDATE & KENT AND MEDWAY ENERGY AND LOW EMISSIONS STRATEGY

Cleaner and Greener Advisory Committee - 9 December 2020

Report of: Deputy Chief Executive and Chief Officer - Planning & Regulatory Services

Status: For Decision

Also considered by: Cabinet - 10 December 2020

Key Decision: Yes

This reports support the Key Aim of The Council's commitment to Net Zero 2030 made in November 2019.

Portfolio Holder: Cllr. Margot McArthur

Contact Officer: Helen French, Ext. 7357;

Recommendation to Cleaner and Greener Advisory Committee:

To recommend to Cabinet to endorse the Kent and Medway Energy and Low Emissions Strategy.

Recommendation to Cabinet:

To endorse the Kent and Medway Energy and Low Emissions Strategy.

Reason for recommendation: To support the Net Zero 2030 commitment.

Introduction and Background

- 1 The Council have committed to working towards achieving net zero carbon emissions by 2030, known as Net Zero 2030. An action to deliver this commitment is as follows:
 - Support the delivery of Kent and Medway's Energy and Low Emissions Strategy
- 2 The purpose of this report is to provide members with a summary of the Kent and Medway Energy and Low Emissions Strategy (ELES) including any specific implications for Sevenoaks District.
- 3 Cabinet is asked to endorse the ELES to support the Net Zero 2030 commitment.

Kent and Medway Energy and Low Emissions Strategy

- 4 The Kent and Medway Energy and Low Emissions Strategy sets out how Kent County Council, in partnership with Medway Council and the Kent district councils, will respond to the UK climate emergency and drive clean, resilient economic recovery across the county.
- 5 Using an evidence based approach, the strategy identifies 10 priority actions to promote the development of an affordable, clean and secure energy supply for the county, reduce greenhouse gas emissions, eliminate poor air quality and reduce fuel poverty.
- 6 These priorities are:
 - **Emission Reduction Pathways to 2050**
Set five-year carbon budgets and emission reduction pathways to 2050 for Kent and Medway, with significant reduction by 2030.
 - **Public Sector Decision Making**
Develop a consistent approach across Kent and Medway, to assess, manage and mitigate environmental impacts (both positive and negative), resulting from public sector policies, strategies, service delivery, commissioning and procurement.
 - **Planning and Development**
Ensure climate change, energy, air quality and environmental considerations are integrated into Local Plans, policies and developments, by developing a clean growth strategic planning policy and guidance framework for Kent and Medway, to drive down emissions and incorporate climate resilience.
 - **Climate Emergency Investment Fund**
Establish a trusted Kent and Medway 'climate emergency' carbon offset scheme and renewable energy investment fund.
 - **Building Retrofit Programme**
Develop Kent and Medway net-zero buildings retrofit plans and programmes for public sector, domestic and business.
 - **Transport, Travel and Digital Connectivity**
Set up a smart connectivity and mobility modal shift programme - linking sustainable transport, transport innovations, active travel, virtual working, broadband, digital services, artificial intelligence and behaviour change.
 - **Renewable Energy Generation**
Set up an opportunities and investment programme for renewable electricity and heat energy generation.
 - **Green Infrastructure**
Develop a multi-functional, natural capital opportunity and

investment programme - focusing on environmental projects that store carbon, increase climate change resilience, improve air quality and soil health and increase biodiversity.

- **Supporting Low Carbon Business**
Develop and implement a Kent and Medway business recovery and support programme to cut costs and win new business.
- **Communications**
Develop a comprehensive communications, engagement and behaviour change programme targeted at residents, employees, businesses and visitors.

7 Each priority has a series of immediate, short (by 2023) and longer term (by 2030) high level activities.

8 The strategy also sets out a series of monitoring indicators to ensure activities and projects remain efficient and to evaluate progress.

Implications for Sevenoaks District

9 The ELES is a sub-strategy of the Kent Environment Strategy and is linked to other strategies supported by SDC including the Growth and Infrastructure Framework, Biodiversity Strategy and Transport Strategies.

10 The ELES aligns with the Net Zero 2030 work already being undertaken by the Council. Including:

- Ensuring climate change considerations are included in the emerging Local Plan.
- Supporting projects to enhance existing, and create new, green infrastructure and habitats.
- Increasing the electric vehicle charging infrastructure within the District.
- Improving the energy efficiency of council buildings and reducing carbon emissions.
- Ensuring climate change and the Net Zero 2030 commitment is considered in decision making.

Next Steps

11 The strategy has been produced on behalf of all 14 Kent and Medway local authorities, and the actions will be taken by the authorities and various private and public sector partners.

12 The strategy has been agreed by Kent County Council (KCC), the Kent Chief Executives Group and the Kent Leaders Group.

Agenda Item 9

- 13 The ELES will be regularly reviewed. Progress reports and the latest indicators will be published online.
- 14 SDC will continue to work closely with KCC to deliver the strategy. We will ensure the ELES is considered and referenced in relevant policies including the Local Plan and in the Net Zero 2030 work.

Other Options Considered and/or Rejected

The Council have made a commitment to Net Zero 2030 and agreed an action to support the Kent and Medway ELES.

Key Implications

Financial

Funding for the Net Zero 2030 commitment will be met from existing budgets.

Legal Implications and Risk Assessment Statement.

No legal implications have been identified.

Equality Assessment

The decisions recommended through this paper have a remote or low relevance to the substance of the Equality Act. There is no perceived impact on end users.

Conclusions

The Council have committed to Net Zero 2030 and have identified actions to go towards this target. Endorsing the Kent and Medway ELES fulfils one of the stage 1 actions.

Appendices

Appendix A - Kent and Medway Energy and Low Emissions Strategy June 2020

Background Papers

None

Richard Morris

Deputy Chief Executive and Chief Officer - Planning and Regulatory Services

KENT AND MEDWAY ENERGY AND LOW EMISSIONS STRATEGY

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MEETING THE CLIMATE CHANGE CHALLENGE

JUNE 2020

Appendix A

Agenda Item 9



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FOREWORD

We've only got one world. Just one. And it's changing.

Some will say **"It's always changed"** but this time around humans are responsible. The decisions we make today set the course for our planet's future. We must do the right thing.

Our Energy and Low Emissions Strategy is a big document with a single, simple goal - to ensure that every resident, neighbourhood and business in the county takes some simple steps to care for this beautiful, productive yet fragile part of the world – the bit we call Kent.

It is part of Kent's wider Environment Strategy and offers you an invitation - an invitation to come with us and find something you can do for your world. Get involved. Join in.

The first step is to recognise this climate emergency and the second is to commit to the change we need to rescue and sustain our world. There is huge pressure for growth in our county and we need to find new ways to ensure it is GOOD growth. It matters to our environment, our economy and our health. As the gateway to Europe we are well placed to take a lead on energy and emissions and our contribution could have positive impacts far beyond our county boundaries.

The call to action is all around us. We see a growing number of severe weather events and nature's response of flooding and then water shortages, icy winters and then rising temperatures. Kent is a wonderful county full of opportunity, but the truth is that some of our people live in places where air quality is low or where fuel poverty is high.

We can all make better choices - when we travel, when we invest, where and when developers plan new homes, when we choose a vehicle or when we insulate our homes. Those decisions are better when advice and learning is shared and when private and public sectors work together.

Please take a look at this Strategy and commit yourself to be part of it.

It means the world to us.



A handwritten signature in black ink that reads "Roger Gough".

Roger Gough
Leader of Kent County Council



A handwritten signature in black ink that reads "Alan Jarrett".

Alan Jarrett
Leader of Medway Council

VISION

By 2050 the county of Kent has reduced emissions to net-zero and is benefiting from a competitive, innovative and resilient low carbon economy, where no deaths are associated with poor air quality.

INTRODUCTION

The **coronavirus pandemic has changed the world**, but presents an opportunity to rebuild the county stronger, cleaner and more resilient. At the same time, **our climate is changing** and the effects are already being felt in Kent and Medway. Limiting our contribution to global warming and driving low carbon economic recovery will undoubtedly be the most urgent issues of this decade.

In recognition of the UK **environment and climate emergency**, all 14 local authorities in Kent and Medway have committed to ambitious targets to reduce greenhouse gas emissions to net-zero by 2050 at the latest. Our joint action has already seen carbon dioxide emissions in the area fall by 37% since 2005, but fully decarbonising our economy

over the coming years will require momentous effort and rely on action taken in partnership.

The coronavirus pandemic will severely restrict growth in the short term, but as we emerge from this crisis the longer-term trajectory will be a **return to growth**, and this growth must be low carbon. By 2031 it is anticipated that there will be almost 180,000 new homes and nearly 400,000 extra people, a 24% increase from 2011 levels. The local economy is also expected to expand, creating an additional 170,300 jobs by 2031 a 21% increase from 2011 levels, in line with forecast population growth.

Economic recovery presents an opportunity to invest in new jobs and low carbon infrastructure; support innovation, re-skilling and retraining to expand the low carbon and environmental goods and services sector; and drive a shift in social norms and behaviour change that will benefit health and reduce emissions. A green, clean economic recovery will help protect the climate, air, land and water on which future generations depend.

Kent and Medway are already experiencing significant environmental issues and constraints.

Trees, hedgerows, grasslands, wetlands and saltmarsh all provide **natural carbon storage** that can provide a significant contribution to our net-zero targets; as well as other environmental and health benefits. However, these important habitats are



at risk from land use pressures, lack of appropriate management, climate change and diseases such as Ash Dieback (*Hymenoscyphus fraxineus*), which threatens Kent's most widespread tree species.

Although air quality is generally improving in line with national trends, there are still **43 Air Quality Management Areas** across Kent and Medway and significant pockets of poor air quality along the county's major road networks. It is estimated that in 2017, there were 922 deaths associated with particulate matter (PM2.5) exposure across Kent and Medway.¹

Pollution from road vehicles is the main cause of poor air quality across Kent and Medway and is also the largest source of carbon emissions. In addition, congestion continues to be a problem, with average journey times on A-roads increasing 6% since 2015. Keeping the county moving is a high priority, as congestion negatively impacts productivity levels and air quality.

Actions to improve and promote public transport and encourage walking and cycling for short journeys, will have the dual benefit of reducing harmful emissions and tackling congestion. Supporting the switch away from petrol and diesel to clean, alternatively fuelled vehicles will also be essential. Over 4,845 ultra-low emission vehicles are already registered in Kent.

The cost of energy is rising. The average annual domestic combined gas and electricity bill increased by 8.8% between 2017 and 2019 and now costs

£1,360.² Government data shows that in 2017, 9.6% of Kent and Medway residents were living in **fuel poverty**.

Many Kent and Medway homes, often those of the most vulnerable residents, are cold and poorly insulated. 34% of homes that have an Energy Performance Certificate have the lowest energy efficiency ratings (E, F and G); usually due to inadequate insulation and inefficient heating systems, which can result in higher energy bills.

In industry, approximately 75% of the energy used is to produce heat, much of which is wasted. This is also true across Kent and Medway. The Government expects **business and industry** to improve energy efficiency by at least 20% by 2030,³ this includes a focus on industrial heat recovery.

Ensuring an **affordable energy supply** for all and continuing to promote energy efficiency, forms a significant element of our Strategy. Supporting new forms of renewable low carbon energy supply will be an important part of the mix, and an opportunity to grow new low carbon sectors. The county has already seen an increase in renewable energy generation of 726% since 2012 (230MW to 1900MW). We must be bold and encourage new developments to create their own decentralised energy.

However, low carbon technologies such as electric vehicles and local renewable energy generation pose a challenge to the electricity grid network in Kent and Medway which is already significantly constrained, and which could inhibit future growth. Therefore,

we must work with the energy utility companies to create a more resilient, **smart and innovative local energy system** to ensure we have the energy we need, when we need it, at the right price and without any negative environmental impacts.

Economic recovery, if clean, is a significant opportunity for Kent and Medway. Measures to tackle poor air quality and lower greenhouse gas emissions will have multiple benefits. For instance, promoting walking and cycling for short journeys improves health and reduces congestion; increasing tree and hedgerow coverage can help improve air quality, manage flood risk and support biodiversity; and supporting a switch to more efficient, low carbon energy use creates jobs and new market opportunities.

By tackling poor air quality, energy and carbon constraints in parallel, and by working closely across the public sector, business and communities to scale up action, we can protect health, the environment and be a significant player in the low carbon environmental goods and services sector (LCEGS) both in the UK and internationally.



¹ Calculated using all age, all cause deaths

² Provisional estimated average bill, Department for Business, Energy and Industrial Strategy (December 2019).

³ Department for Business, Energy & Industrial Strategy, "Helping businesses to improve the way they use energy: call for evidence," 18th July 2018 [online]

PURPOSE OF THIS STRATEGY

The Kent and Medway Energy and Low Emissions Strategy sets out how we will respond to the UK climate emergency and drive clean, resilient economic recovery across Kent and Medway. Taking an evidence-based approach, it identifies a pathway to reduce greenhouse gas emissions, eliminate poor air quality, reduce fuel poverty, and promote the development of an affordable, clean and secure energy supply for this county. It is informed by and delivers, but does not duplicate, the priorities and actions from other strategies related to energy and the environment. The strategy also builds on the strengths and activities of other partner organisations.

The Strategy has four strategic aims:

1. **EVIDENCE:** Provide an ongoing evidence and intelligence base; linking data sets to identify hot spots and opportunities, and to build the business case for action across Kent and Medway
2. **POLICY AND STRATEGY:** Facilitate the development of evidence-based policy and strategy to future-proof economic recovery, tackle emerging issues and realise opportunities
3. **LEADERSHIP:** Support the public sector across Kent and Medway to play a strong leadership role with regards to challenges and opportunities
4. **ACTION:** Facilitate increased and accelerated action and implementation across Kent and Medway

The priority actions to deliver these four aims over the next five years are described on pages 15-27. Further information on the detailed actions, timescales and outputs are provided in the technical implementation plan, which is published alongside this strategy.

SUPPORTING DELIVERY OF THE KENT ENVIRONMENT STRATEGY

The Kent and Medway Energy and Low Emissions Strategy sits within the framework of the Kent Environment Strategy, which was published in 2016.

The Kent Environment Strategy provides the basis for closer cross-sector partnership working between environment, health and economic agendas. It identifies the high-level priorities to support sustainable economic growth whilst protecting and enhancing the natural and historic environment, and sustaining vibrant, healthy and resilient communities.

The Kent and Medway Energy and Low Emissions Strategy delivers across all three themes of the Kent Environment Strategy:

THEME 1: BUILDING THE FOUNDATIONS FOR DELIVERY – aims to ensure decision makers have an evidence-based understanding of the risks and opportunities relating to energy and emissions and are incorporating them into strategies, plans and actions.

THEME 2: MAKING THE BEST USE OF EXISTING RESOURCES, AVOIDING OR MINIMISING NEGATIVE IMPACTS – aims to ensure existing infrastructure, assets and resources across the public, private and domestic sector are managed to reduce emissions and build a clean future energy supply.

THEME 3: TOWARDS A SUSTAINABLE FUTURE – aims to ensure Kent and Medway's communities, businesses and public sector have embraced clean growth and are working towards developing a clean, affordable and secure local energy future.

POLICY CONTEXT

Climate change, energy and air quality issues are high on the national agenda. The Government has set a clear policy direction by revising the Climate Change Act 2008 to legislate for net-zero by 2050. Net-zero means reducing greenhouse gas emissions to almost zero and balancing any remaining emissions with schemes to remove carbon dioxide from the atmosphere, such as tree planting or technology.

Further policy is set out in the Home Energy Conservation Act 1995, the 25 Year Environment Plan (2018), the Clean Growth Strategy (2017), the Clean Air Strategy (2019) and Clean Maritime Plan (2019), which aim to protect and enhance the environment, mitigate climate change, support clean, low carbon economic growth and address the negative impacts on health from a poor environment.

Local action will play a significant role in achieving these ambitions and therefore local policy must reflect these priorities. The key strategies that have influenced the development of the Energy and Low Emissions Strategy are summarised in Figure 1. Further detail on the policies driving action are outlined in the ***Kent and Medway Energy and Low Emissions Strategy Evidence Base***, which is published alongside this strategy.



FIGURE 1: Key national and regional strategies influencing the development of the Kent and Medway Energy and Low Emissions Strategy.

EXAMPLES OF ACTIVITY AND ACHIEVEMENTS IN KENT AND MEDWAY

Carbon dioxide emissions in Kent and Medway fell 37% between 2005 and 2017, hitting our 2020 Kent Environment Strategy target two years early.



Low Carbon Across the South East (LoCASE) has been identified in the Tri-LEP Energy Strategy as an exemplar project for replication across the south-east region. Supported by European funding, LoCASE provides free support to help businesses become more competitive and profitable while protecting the environment and encouraging low carbon solutions. Since LoCASE began in 2016, £3.5m has been awarded to 425 Kent and Medway businesses.



The installed capacity of solar, wind, waste and Combined Heat and Power (CHP) increased by 726% in five years, from 230MW in 2012 to 1,900MW in 2017.

Kent and Medway's non-domestic gas consumption decreased by 57% between 2005 and 2018, whilst domestic gas consumption fell by 20% over the same period.

The number of days of moderate or high air pollution in Kent and Medway fell between 2012 and 2016 and there have been improvements in most Air Quality Management Areas.



Since the Warm Homes Scheme began in 2014, over 2,400 energy efficiency measures have been installed in over 2,300 homes in Kent and Medway.



89% of newly built homes in Kent and Medway had an Energy Performance Certificate rating of A or B in 2017, meaning they have the highest energy performance, up from 62% in 2011.

Average household electricity use in Kent and Medway continues to fall; down from 4,117 kWh in 2015, to 3,894 kWh in 2018. A 5% reduction in three years.

4,845 ultra-low emission vehicles (ULEVs) are registered in Kent (September 2019). In February 2019, Kent County Council was awarded £180,000 from the Government's Office of Low Emission Vehicles to install 8 rapid chargers for use by taxis in 6 Kent Districts.

In a 2018 survey of Kent residents, 85% reported that they have fitted energy efficiency measures, such as loft or cavity wall insulation, and 40% have fitted energy monitoring equipment.

There has been a 42% increase in people using train stations in Kent in the past ten years. In 2016/17, 1.8 million people used Ebbsfleet International Station.

KENT AND MEDWAY KEY FACTS AND FIGURES

54%

of total fuel consumption is from gas and electricity



Heat networks⁴ currently provide 2% of the UK heat demand, but this is estimated to rise to 43% by 2050.

EFG RATING

23% of homes and 19% of public buildings are E, F, or G rated, meaning they have the worst energy performance, highest energy running costs and make a bigger contribution to emissions.



11% of residents have reported that they struggle to pay their energy bills. 41% of those, live in rented accommodation.⁵

BY 2031 KENT AND MEDWAY ARE EXPECTING TO SEE⁶



178,600
additional homes
(24% growth)



396,300
additional people
(23% growth)



170,300
additional jobs
(21% growth)

This predicted population and economic growth will require a higher demand for energy. It is likely that domestic gas and electricity sales will rise by 23% and 19% respectively from 2014/15 to 2030/31.

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9.2M

vehicle movements at Port of Dover and Channel Tunnel every year



14.3% increase in the number of vehicles on major roads in Kent between 2006 and 2016



73,000

households in fuel poverty (2017)

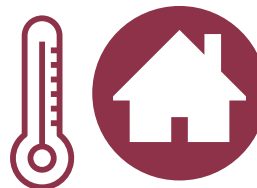


Only a 4.5% fall in carbon emissions from transport since 2005.

43 AIR QUALITY

Air Quality Management Areas, where air pollutants have been known to exceed government objectives.

Kent's rate of Excess Winter Mortality was the same as the South East and English averages in 2017/18.



Kent's rate of Excess Winter Mortality was the same as the South East and English averages in 2017/18.

Kent and Medway's mortality rate associated with poor air quality is worse than the national average.

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⁴ Heat networks supply heat from a central source to consumers.

⁵ Kent Environment Strategy resident survey, July 2018

⁶ Figures identified by the Growth and Infrastructure Framework for Kent and Medway

OUR CHALLENGES

Despite the many successes and opportunities, Kent continues to face some significant challenges. These will need to be addressed in the short to medium-term if the environmental condition of the county is not to see considerable deterioration. The Kent and Medway Energy and Low Emissions Strategy Evidence Base identifies the key issues, which are summarised here:

SECURING A CLEAN, GREEN ECONOMIC RECOVERY

Supporting economic recovery from the coronavirus pandemic and accommodating the significant levels of housing growth currently required by government will be a major challenge for the county and is an influencing factor in all the key issues identified. This means not only creating new jobs and supporting low carbon innovation, but also advancing climate action in ways that make Kent and Medway more resilient and attractive places for low carbon companies to invest. Principles of Clean Growth (growing our economy whilst reducing greenhouse gas emissions), must be factored into all planning and development polices and decisions, whilst not becoming a barrier to new development.

REDUCING GREENHOUSE GAS EMISSIONS TO NET-ZERO

All local authorities in Kent and Medway have committed to reducing greenhouse gas emissions to net-zero. Our current progress is a 37% reduction in carbon dioxide emissions since 2005 but achieving our target will require a substantial step up in action, both in terms of scale and speed.

Whilst emissions from the industry and commercial sector and domestic sector have fallen significantly over the period (falling 57% and 35% respectively), emissions from the transport sector have only reduced by 4.5% (see Figure 2). The transport sector is now the largest source of emissions in Kent and Medway.

To date, much of the reduction in emissions has been due to a national decrease in the use of coal for electricity generation and the closure of a small number of energy-intensive industrial plants. However, in order to achieve net-zero, all

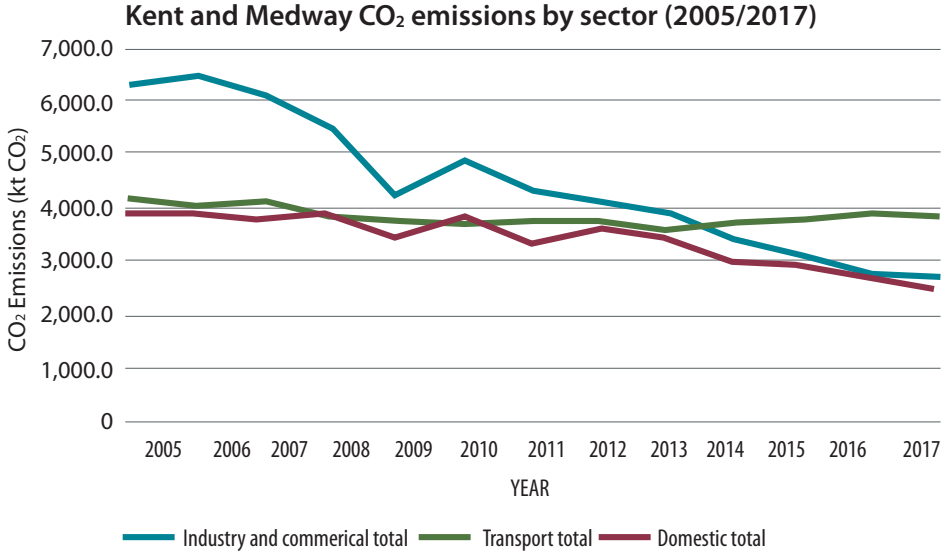


FIGURE 2: CO₂ emissions profile for Kent and Medway; this data includes estimated emissions for the industrial and commercial, transport and domestic sectors. Note: kt refers to kilotons

sectors will need to use resources much more efficiently and switch to low-carbon fuels for electricity, heating and transport.

We will also need to increase the amount of carbon stored in the natural environment; this is known as carbon sequestration. Soil and vegetation such as trees, hedges, wetlands and kelp all store carbon, so improving land management practices and increasing vegetation coverage will be essential if we are to achieve our net-zero target. These measures can also provide other benefits, such as reducing air and water pollution, reducing flood risk, improving biodiversity and providing health, cultural and leisure opportunities for local communities.

TACKLING HOT-SPOTS OF POOR AIR QUALITY

Poor air quality is a major health challenge for the UK causing both short and long-term effects on health. Long-term exposure to air pollution can impact on all stages of life; from asthma in children, to emerging evidence linking fine particulate matter (PM_{2.5}) to the progression of Alzheimer's and Parkinson's.

Public Health England estimates that the cumulative health and social care costs of air pollution (PM_{2.5} and NO₂) in England could reach £18.6 billion by 2035. Poor air quality also has adverse impacts on the natural environment through damage to vegetation, soils, rivers and lakes.

Although air quality in the county is generally improving in line with national trends, there are still 43 Air Quality Management Areas and significant pockets of poor air quality along the major road networks. Kent and Medway's position between London and the continent brings air quality challenges associated with cross-channel traffic, including a disproportionately large number of HGVs, with their associated diesel emissions. Around the coast and ports, shipping brings additional impacts from the use of marine diesel. Even air pollution sources from outside Kent and Medway impact the population; with easterly winds bringing pollution from continental sources and westerly winds bringing urban pollution from London.

PROTECTING THE VULNERABLE

It is often the most vulnerable and deprived that suffer the most from poor air quality, cold homes and fuel poverty. Whilst air pollution is harmful to everyone, some people are at greater risk due to

- living in areas with high levels of air pollution
- learning or working near busy roads
- age; in the womb, infancy, early childhood and the elderly
- existing medical conditions, such as lung and heart disease and asthma.

These vulnerabilities are heightened among those living in the most deprived communities. This is due to poor housing and indoor air quality, the stress of living on a low income, unhealthy diet, smoking and limited access to green spaces.

Eliminating poor air quality and fuel poverty and achieving net-zero emissions will require changes to the way we travel, access services and use energy. We must therefore ensure that all residents in Kent and Medway are supported to make and benefit from these changes. For example, providing funding to help those in fuel poverty improve the energy efficiency of their home and ensuring superfast broadband, public transport and refuelling points for low carbon vehicles are widely available.

GROWTH WITHOUT GRIDLOCK – ENABLING INTEGRATED AND CONNECTED TRANSPORT, TRAVEL AND DIGITAL CONNECTIVITY

A convenient, affordable and reliable transport network is vital for providing access to facilities and services, connecting businesses and communities and reducing social isolation. However, transport contributes over 40% of the county's carbon emissions and pollutants from road vehicles have a negative impact on air quality and human health.

Kent is already experiencing increased congestion on its road and rail network. The average delay on Kent's A-roads has increased almost 7% since 2015 and average speed has dropped 1% over the same period. With severe congestion on the highway network, particularly in major town centres, growth across the county will be constrained without investment.

Achieving safe and effective transport networks that support clean economic recovery is a significant challenge. Our action must not only focus on low carbon road transport such as electric and hydrogen vehicles, but also promote smarter driving and traffic management; improve infrastructure for walking and cycling (active travel); ensure convenient connections to clean public transport; and support new transport models such as car clubs, car sharing and automated vehicles through the use of smart technology.

Promoting and supporting active travel will be an essential element of the strategy, which will not just help to reduce emissions, but also bring numerous health benefits.

At the same time, we need to support smarter working practices. The coronavirus pandemic forced many organisations and businesses to adapt to home working

overnight. As restrictions are lifted and the economy recovers, we must utilise and learn from this experience, whilst continuing to improve broadband services and enhance access to digital services to ensure demand for travel reduces permanently. Over 95% of Kent and Medway's homes and businesses now have access to superfast broadband, but there are still significant challenges to get 100% consistent coverage and service across the county and ensure the full benefits of digitalisation are realised.

ENSURING ENERGY SUPPLIES ARE LOW-CARBON, SECURE, AFFORDABLE AND LOCAL WHERE POSSIBLE

Energy prices are increasing again. Government data estimates that the average annual domestic combined gas and electricity bill increased by 8.8% between 2017 and 2019 and now costs £1,360. Higher energy prices can have an impact on business recovery and residents' wellbeing. Although fuel poverty levels vary across the county; from 12.3% in Thanet, to 7.7% in Dartford, eight council areas recorded fuel poverty rates higher than the South East average of 8.7% in 2017.

Continued housing growth means that our energy consumption is set to rise. A study commissioned by Kent County Council revealed that between 2014/15 and 2030/31, domestic gas demand in Kent and Medway is expected to increase by 23% and domestic electricity demand is expected to increase by 19%.

Demand for energy is exacerbated by the fact that large amounts are wasted. The UK has some of the least energy efficient housing stock in Europe and much of the industrial heat produced in South East England is released into the atmosphere, despite the fact it could be reused. There is a huge opportunity to utilise more efficient technology to reduce energy demand and achieve cost savings for residents and businesses alike.

Demand for heat and electricity, together with generation and supply is intrinsically linked to carbon dioxide emissions, due to our current reliance on fossil fuels. It is therefore essential to understand how much energy is used, by whom, how and for what, and how this might change in the future. This will allow us to identify the most appropriate and cost-effective interventions to support the transition to a secure, affordable, low or zero carbon energy system.

The challenge of decarbonising energy at the local level will be threefold:

- Increase the supply of local, low carbon energy generation, at or near the point of use, whether domestic or industrial.
- Significantly cut consumption of energy derived from fossil fuels, for example, facilitating low-carbon energy connections for properties that are not connected to the gas network and still heated by coal or oil.
- Eliminate wasted energy through greater energy efficiency, targeting industrial processes, commercial buildings and homes.

OVERCOMING ENERGY GRID CONSTRAINTS

Energy security is vital to the development and growth of Kent and Medway in the coming years. However, the energy system in the UK and Kent is changing. Two-thirds of the UK's existing coal, gas and nuclear power stations are set to close by 2030 and any future power stations must be largely decarbonised, if the UK is to achieve its legally binding target of cutting carbon emissions to net-zero by 2050.

Much of the county is already subject to electricity grid network constraints, which is making new connections increasingly difficult, particularly for new energy generation projects. Electricity demand is also expected to grow significantly by 2050, driven by the growth in electric vehicles and increased electrification of heating, which could see up to 60% of homes using heat pumps. A drive towards locally generated renewable energy, often from smaller, more dispersed sources, will further ramp up pressure on an already constrained electricity grid network.

Changing supply and demand, though an enormous opportunity, also presents significant challenges to our existing system nationally and locally. It will require large amounts of investment in infrastructure and the transmission and distribution networks. It will be essential to map existing electricity and gas grid constraints against future development, to identify potential issues early and to identify any opportunities for local generation solutions, such as district heating systems.

HOW WE DEVELOPED THIS STRATEGY

Underpinning this Strategy is the *Kent and Medway Energy and Low Emissions Strategy Evidence Base*, which is drawn from a wide range of sources:

- Government strategies, plans, reports and national data sets.
- The Tri-LEP Energy Strategy and Evidence Base.
- The Kent and Medway State of the Environment Report and annual monitoring report.
- AECOM Renewable Energy for Kent 2017 Update.
- Public health indicators and evidence covering national and local area data.
- Home energy conservation and fuel poverty action plans and reports.
- Air quality monitoring plans and reports from Kent District and Borough Councils and Medway Council.
- Public and private sector research and current activity on the topics of energy, fuel poverty, transport, air quality, growth and planning and the impacts on public health.
- The 2018 Kent Environment Strategy Public Perception Survey.

Central to the development of this strategy has been stakeholder engagement, through a dedicated cross-sector working group, workshops and consultations. Organisations and partners involved in the development of the strategy include, amongst others, all Local Authorities in Kent and Medway, Joint Chief Executives, Joint Kent Leaders, NHS, Kent Fire and Rescue Service, South East Local Enterprise Partnership, Kent and Medway Economic Partnership, Public Health, Kent Housing Group, Kent and Medway Air Quality

Partnership, Kent and Medway Sustainable Energy Partnership, Kent Energy Efficiency Partnership, Kent Planning Officers Group and Kent Health and Wellbeing Board. A summary of the review process is shown in Figure 3.

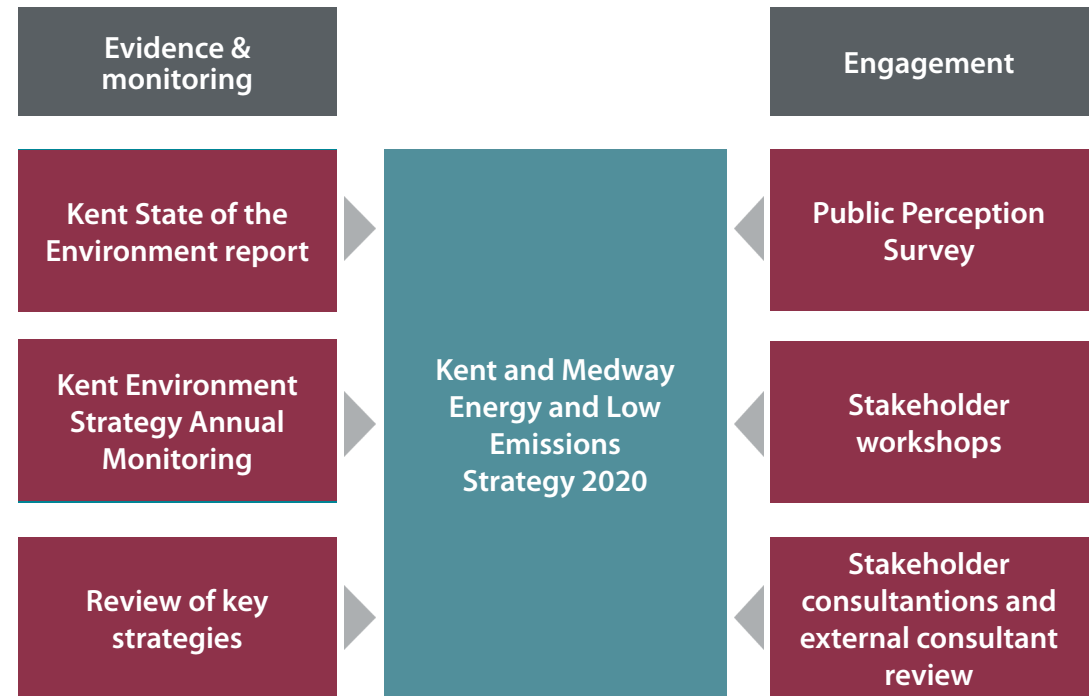


Figure 3: Summary of the review process used to develop the Kent and Medway Low Emissions Strategy

ENERGY SOUTH TO EAST: TOWARDS A LOW CARBON ECONOMY - THE TRI-LEP ENERGY STRATEGY

The Government’s Department for Business, Energy and Industrial Strategy (BEIS) has requested and provided the funding to all Local Enterprise Partnerships (LEPs) to produce regional Local Energy Opportunities Strategies, which should provide a clear analysis of the local opportunities and challenges across heat, transport and power.

In response to this request, the South East Local Enterprise Partnership (SELEP) has partnered with Coast to Capital and Enterprise M3, to develop an ambitious regional Local Energy Strategy, which aims to reduce emissions from energy and transport and support clean growth.

The strategy has identified five themes and 18 potential technological project model interventions, which are shown in Figure 4. These interventions will be scalable across the geography to increase impact and investment and develop partnership working across Local Enterprise Partnerships, including Kent and Medway. Where project models are relevant for Kent and Medway, suitable actions will be reflected in the Kent and Medway Low Emissions Strategy.

The full strategy can be found at www.southeastlep.com/our-strategy/energy-south2east.

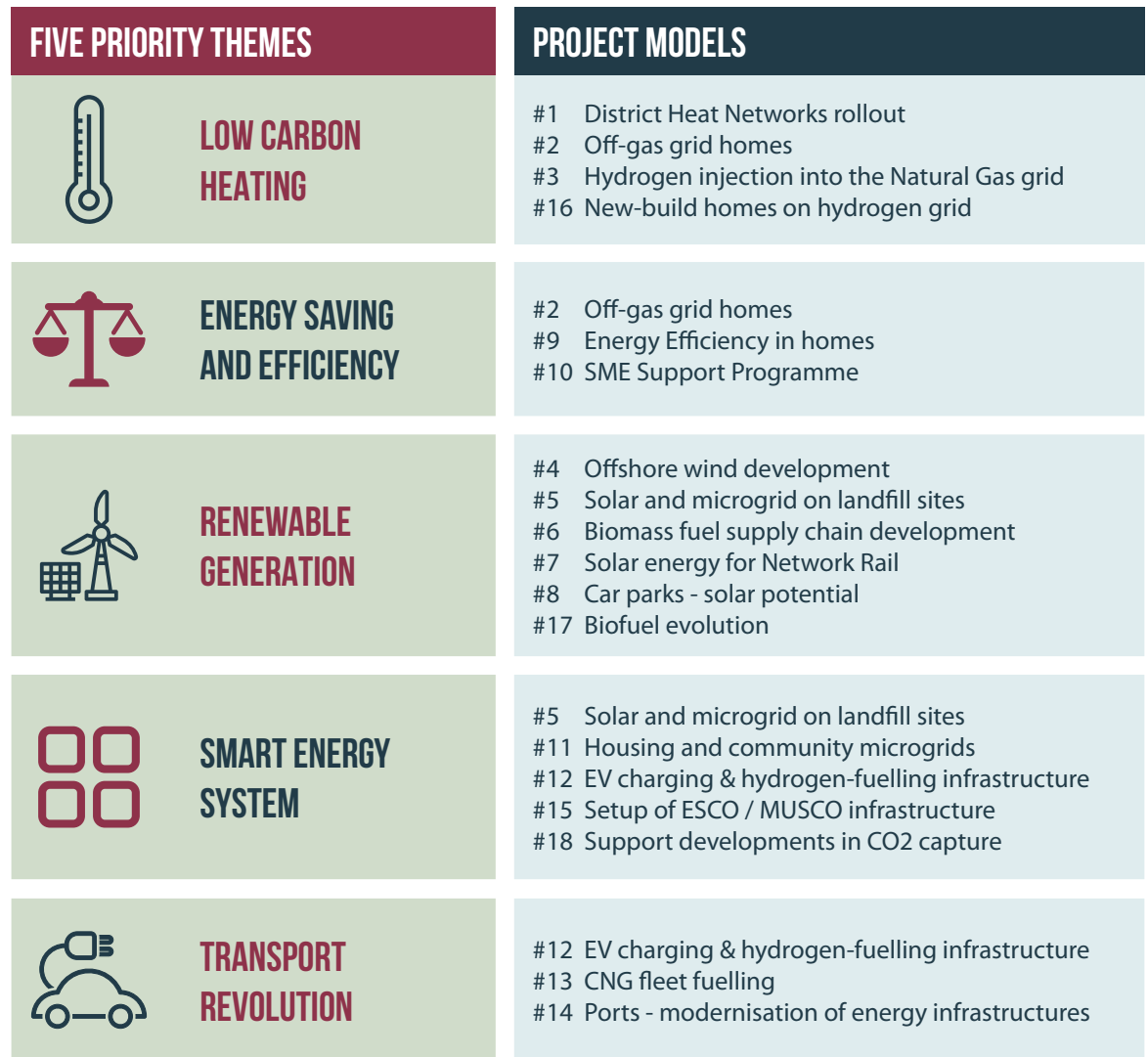


Figure 4: The 5 themes and 18 project models in the Energy South2East Action Plan.

OUR TEN PRIORITIES

Achieving our vision will require significant, coordinated action across all sectors for the next thirty years. The following pages describe the ten areas that have been identified as a priority for collaboration and the immediate, short- and longer-term actions required.

The priorities are not listed in order of importance and will be implemented concurrently. No regrets actions that should be undertaken immediately have also been included to ensure significant action takes place as soon as possible.

A technical implementation plan accompanies this strategy and provides detailed information on the specific actions that will be taken, action owners, timescales and outputs.





PRIORITY 1: **EMISSION REDUCTION PATHWAYS TO 2050**

Set five-year carbon budgets and emission reduction pathways to 2050 for Kent and Medway, with significant reduction by 2030.

RATIONALE

Carbon budgets will set quotas for the amount of greenhouse gases that can be emitted in five-year periods. These can then be used to identify the actions (or pathways), that will allow us to stay within our carbon budgets. Such evidence-based pathways will ensure we prioritise the most cost-effective activities and will support more collaborative working with partners across the county, region and nationally. It will also highlight where appropriate engagement is needed to influence aspects outside local authorities' control.

OUTCOME

Everyone in Kent and Medway can see the scale of action required to achieve net-zero emission by 2050, with significant reductions in emissions by 2030. Decision makers understand where action and resources should be targeted. Progress is monitored and reported.

HIGH LEVEL ACTIVITIES

| | |
|--|---|
| DO NOW | Agree evidence and current baseline for five-year carbon budgets. |
| | Set local authority carbon budgets with emission reduction pathways to net zero by 2050, with significant reduction by 2030. |
| SHORT TERM (BY 2023) | Set costed and jointly owned area-based carbon budgets for Kent and Medway. |
| | Set detailed, area-based emission reduction pathways to net zero by 2050, with significant reduction by 2030. Pathways to cover all public and private organisations and communities. |
| | Monitor and report progress publicly. |
| FOR LONGER TERM CONSIDERATION (BY 2030) | Develop a full carbon footprint for Kent and Medway based on consumption (not territorial or organisational boundaries), with consumption targets and reduction measures integrated into existing carbon budgets. |



PRIORITY 2: PUBLIC SECTOR DECISION MAKING

Develop a consistent approach across Kent and Medway, to assess, manage and mitigate environmental impacts (both positive and negative), resulting from public sector policies, strategies, service delivery, commissioning and procurement.

RATIONALE

The decisions made by Kent and Medway’s public sector affect the environment and everyone living and working in the area. Kent County Council alone spends over £1.5 billion each year providing a range of essential services to the people of Kent. Developing a simple way to assess, manage and mitigate these impacts will ensure public sector policies, services and spending support our environmental targets. In addition, the public sector’s influence and spending power will help drive demand and support innovation in the local clean growth sector.

OUTCOME

Public sector decisions and spending are consistent with our net-zero and clean growth targets and are utilising opportunities to drive market change and support expansion in the clean growth sector.

HIGH LEVEL ACTIVITIES

| | |
|--|--|
| DO NOW | Develop a simple checklist to identify where significant environmental issues and opportunities may arise, for use on imminent key decisions, major commissions and procurements. |
| | Revisit existing social value commitments within contracts and align to climate change and net-zero ambitions where possible. |
| | Stronger emphasis on reducing carbon miles and on buying local goods and services where possible. |
| SHORT TERM (BY 2023) | Develop a full net-zero and climate change impact assessment and social value framework aligned with Kent and Medway targets, to include: specific policies such as requiring the supply chain to match net-zero commitments; simple checklists; guidance and tool kits; training and technical support. |
| | Develop a supply chain support programme to enable small and medium sized enterprises (SMEs), within large supply chains to effect change and reduce costs; adopt new lower impact processes and win new business. |
| FOR LONGER TERM CONSIDERATION (BY 2030) | Consider expanding to include a full carbon and ecological footprint, based on consumption and lifetime costs in strategy, policy, commissioning and procurement. |



PRIORITY 3: PLANNING AND DEVELOPMENT

Ensure climate change, energy, air quality and environmental considerations are integrated into Local Plans, policies and developments, by developing a clean growth strategic planning policy and guidance framework for Kent and Medway, to drive down emissions and incorporate climate resilience.

RATIONALE

Almost 180,000 new homes will have been built in Kent and Medway by 2031 and will still be in use after 2050. To ensure the buildings and infrastructure we construct today are fit for the zero-carbon future, we need to ensure planning policies and decisions embrace clean growth, support good quality sustainable design and promote low carbon travel, transport and digital connectivity. A joint evidence base and planning resource, together with shared position statements, guidance and policies will help inform planning decisions and future-proof new developments.

OUTCOME

New developments in the county are sustainable, carbon neutral and climate resilient. Kent and Medway’s development and construction industry is supported to be cutting edge to enable a quicker economic recovery for the sector.

HIGH LEVEL ACTIVITIES

| | |
|--|---|
| DO NOW | Secure agreement for a joint Kent and Medway clean growth and climate change evidence base and planning resource, to ensure that planning decisions are fully informed by the latest evidence and advice. |
| | Refresh the Kent Design Guide to reflect clean growth, net-zero and climate change mitigation and adaptation. |
| SHORT TERM (BY 2023) | Develop a jointly owned, clean growth and climate change evidence base for planning policy and development control. |
| | Develop a clean growth and climate change strategic planning framework for Local Plans and development, by identifying common guidance, position statements, policies and targets. |
| | Set stretching net-zero targets for any new development over 100 houses. |
| FOR LONGER TERM CONSIDERATION (BY 2030) | Fully integrate clean growth and climate change into Local Plans and planning policies. |
| | Aim for “energy positive” new developments and communities (communities producing more energy than they are using). |



PRIORITY 4: **CLIMATE EMERGENCY INVESTMENT FUND**

Establish a trusted Kent and Medway ‘climate emergency’ carbon offset scheme and renewable energy investment fund

RATIONALE

Before the coronavirus pandemic, funding for climate emergency actions came from many disparate sources including; developer contributions, business rates, public sector funding, charitable donations from residents and businesses, and external grants and funding. There is likely to be significantly less funding available for environmental projects in the short to medium term, so ensuring money is invested in projects that have the greatest impact and bring multiple benefits will become increasingly important.

A climate emergency investment fund for Kent and Medway will pool the funding available and match it to the most cost effective and biggest impact schemes. The fund will be informed by renewable energy and natural capital opportunities studies.

OUTCOME

Developers, businesses, public sector and residents can offset their carbon emissions by investing in meaningful ‘climate emergency’ projects in Kent and Medway, such as tree and hedge planting, habitat improvement, renewable energy generation and building retrofit. The fund not only generates additional resources for delivering our climate emergency targets, but also brings environmental and social benefits.

HIGH LEVEL ACTIVITIES

| | |
|--|---|
| DO NOW | Review existing funding streams and see how they can be tweaked to provide additional resource. |
| | Package up quick wins and ‘oven-ready’ projects suitable for external funding such as crowd funding or business sponsorship |
| | Review external funding expertise and opportunities and look at increasing access to finance through collaboration and development of a central resource. |
| SHORT TERM (BY 2023) | Develop and promote a Kent and Medway offset scheme and permanent crowd funding space to support new and existing local environmental projects and groups. |
| FOR LONGER TERM CONSIDERATION (BY 2030) | Further develop a cross-sector, multi-agency sequestration, offset and low carbon investment fund for Kent and Medway that can be used by the public, community and private sector. |

CASE STUDY: WORKING WITH SCHOOLS TO TACKLE AIR POLLUTION

In 2018, Maidstone Borough Council and Tunbridge Wells Borough Council environmental health teams worked with local schools to tackle local air pollution. Schools who signed up to the Clean Air for Schools Scheme were helped to undertake an engaging class experiment. Schools were provided with two free air monitoring tubes per month, along with a teaching pack and guidance on how to record data and report the results back to the council.

This hands-on approach allowed students to analyse the direct relationship between the volume of traffic outside their school and its impact on air pollution within the school grounds. The objective was to encourage a reduction in car journeys made by parents and to highlight the effects of leaving engines idling while dropping off and collecting children.

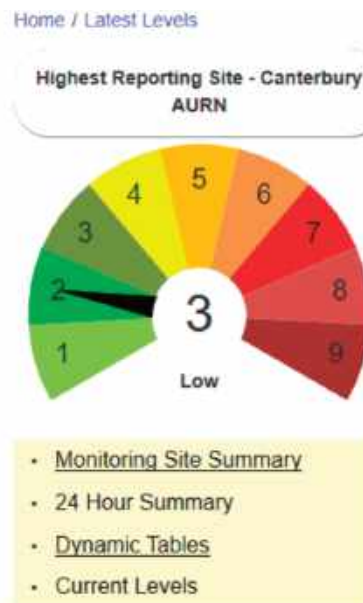
The project was launched in conjunction with the KM Charity Team’s Green Champions and is sponsored by the Mid-Kent Environmental Health Team, with no funding required from the schools. For more information, or to register, visit: www.maidstone.gov.uk/cleanairforschools. Similar schemes are now also run by Medway Council and Swale Borough Council, in partnership with the KM Charity Team.



CASE STUDY: KENT AIR WEBSITE

The Kent and Medway Air Quality Monitoring Network is funded by the district and borough councils within the county, Medway Council and Kent County Council. The network aims to promote the improvement of air quality within the region, to help local authorities to meet their obligations under environmental regulations and to maintain an accessible database of robust measurements for public reporting, research and development.

The Kent Air website has been developed by the network to provide easy public access to live air quality levels, historic data measured from automatic monitoring and NO2 diffusion tubes, and published data and reports for Medway and all district and borough councils except for Dartford and Sevenoaks (whose data is hosted on the London Air Quality Network website: www.londonair.org.uk). The website also provides information about the health impacts of air pollution and recommended health advice for the forecast level of pollution.





PRIORITY 5: BUILDING RETROFIT PROGRAMME

Develop Kent and Medway net-zero buildings retrofit plans and programmes for public sector, domestic and business.

RATIONALE

Over the next 30 years, most of the emissions from the built environment will be from buildings or communities that are already in existence today. In addition, some of our most vulnerable residents are living in cold, energy inefficient homes which are expensive to run; worsening health problems and causing fuel poverty. Funding for building improvements is fragmented and complicated by property ownership issues, and projects often need to be done at scale to attract the investment needed.

In the short term, our activities will focus on expanding and accelerating existing domestic energy efficiency and fuel poverty initiatives and supporting energy efficiency and low carbon heat generation in non-domestic buildings. These programmes will then need to be expanded to ensure retrofit is seen from the perspective of a 'place', linking public buildings and the public realm, schools, businesses and homes, both rented and owned.

OUTCOME

Greenhouse gas emissions from Kent and Medway's existing buildings are significantly reduced and the housing stock no longer exacerbates levels of fuel poverty. High volume retrofit programmes for homes, businesses and public sector buildings maximise external funding and finance, supporting the local retrofit industry to be cutting edge.

HIGH LEVEL ACTIVITIES

| | |
|---|---|
| <p>DO NOW</p> | <p>Undertake 'quick-wins' in public and commercial premises such as converting lighting to LEDs, installing energy and water efficiency measures and controls and training building managers.</p> <p>Utilise and promote existing funding pots:</p> <ul style="list-style-type: none"> • Kent and Medway Warm Homes Programme and other domestic energy efficiency and fuel poverty projects through the Kent Energy Efficiency Partnership (KEEP). • LOCASE (Low Carbon Across the South East) grant support programme to improve efficiency of local businesses. |
| <p>SHORT TERM (BY 2023)</p> | <p>Establish a public sector building retrofit programme, identifying joint initiatives that maximise economies of scale including shared buildings and facilities, EV charging and micro energy generation.</p> <p>Look to scale up housing retrofit by maximising government funding and developing innovative funding mechanisms with a focus on fuel poor; difficult to treat properties such as park homes; off-gas properties; private rented sector; and 'Able to Pay'.</p> <p>Scope cross-sector place-based approach, identifying quick wins and how we can work with private investors to scale up retrofit across Kent and Medway.</p> |
| <p>FOR LONGER TERM CONSIDERATION (BY 2030)</p> | <p>Develop a large scale, cross-sector, area-based retrofit programme. The programme will focus on place and public realm, including business and communities, to create net-zero and "energy positive" communities.</p> |



PRIORITY 6: TRANSPORT, TRAVEL AND DIGITAL CONNECTIVITY

Set up a smart connectivity and mobility modal shift programme – linking sustainable transport, transport innovations, active travel, virtual working, broadband, digital services, artificial intelligence and behaviour change.

RATIONALE

Tackling poor air quality and achieving safe and effective transport networks that support low carbon economic recovery have been highlighted as key challenges for Kent and Medway. Furthermore, greenhouse gas emissions from transport have remained stubbornly high, but the coronavirus pandemic triggered a change in digital and travel behaviours that could be utilised to ensure emissions from transport are reduced permanently.

Tackling these issues and opportunities will require a combination of measures that improve infrastructure and facilities to encourage low carbon travel and drive behaviour change. We must also continue to tackle poor air quality hotspots, through the implementation of Air Quality Management Plans.

OUTCOME

Greenhouse gas emissions from transport and travel are significantly reduced and air quality is improved.

HIGH LEVEL ACTIVITIES

| | |
|--|--|
| DO NOW | <p>Set a challenging 2030 business miles reduction target for the public sector.</p> <p>Work collaboratively with the public and private sector to roll out EV charging points and infrastructure for walking and cycling.</p> <p>Support public transport providers, including school transport providers, to use lower emission vehicles.</p> <p>Tackle poor air quality hotspots through the implementation of Air Quality Management Plans.</p> |
| SHORT TERM (BY 2023) | <p>Develop and expand sustainable travel policies that reduce car use and business miles, through a hierarchy of travel options to reduce the need to travel, encourage modal shift to walking, cycling and public transport or increase car sharing.</p> <p>Implementation of low-carbon mobility hubs for electric cars, electric bikes and push bikes, to include battery storage and solar panels where possible.</p> |
| FOR LONGER TERM CONSIDERATION (BY 2030) | <p>Review and develop approaches that consider:</p> <ul style="list-style-type: none"> • locating services nearer to public transport or within walking distance of communities • reallocation of road space in favour of more sustainable travel modes • increased control, regulation and charging for public parking in favour of electric vehicles and public transport • increased involvement in regulation of public transport and taxis to tackle poor air quality and lower greenhouse gas emissions • testing and roll-out of new technologies to enable the transition to low carbon transport and travel. |

CASE STUDY: PARK AND PEDAL IN CANTERBURY

In June 2018, Canterbury City Council launched its Park and Pedal scheme at Wincheap Park and Ride. Over 1,200 journeys were recorded between July 2018 and January 2019. Of these journeys, 87% were by customers who were not regular users of the Wincheap Park and Ride and would normally have driven into the city centre.

Cyclists who sign-up to the scheme pay a £15 deposit for a key card that allows them to leave their bike in a high security compound. They are then able to drive to the car park each morning and park for free, before grabbing their bike and heading into the city, helping to cut the queues and improving air quality in the town centre.

The scheme was largely funded by a £21,300 grant from Kent County Council. The Park and Pedal map can be viewed on Canterbury City Council website and shows bike routes from Wincheap Park and Ride into the city, cycle racks and places to refill your water bottle.



CASE STUDY: MAKING KENT HOMES WARMER

Through a combination of schemes and initiatives, local authorities in Kent and Medway have been able to maximise funding and signpost residents to initiatives that make homes warmer, reduce health inequalities and lower carbon emissions.

Since 2013, Dartford, Dover, Gravesham, Tonbridge and Malling and Tunbridge Wells Councils have offered a Collective Energy Switching scheme, called Energy Deal. Residents can register for free to take part in energy auctions (held 3 times a year), to identify lower energy tariffs without any obligation to switch. Since 2013, the Energy Deal has helped residents save £804,632 on their energy bills collectively.

Kent and Medway partners are also working together to promote the Warm Homes scheme that helps residents identify energy efficiency measures that will help lower their energy bills and make their homes feel warmer. Since the Warm Homes scheme began in 2014, over 2,400 energy efficiency measures have been installed in over 2,300 homes. In total, the measures are expected to save an estimated 39,000 tonnes of carbon and save residents £8.8 million over the course of the measures' life.

For more information visit www.energydealswitch.com and www.kent.gov.uk/warmhomes





PRIORITY 7: RENEWABLE ENERGY GENERATION

Set up an opportunities and investment programme for renewable electricity and heat energy generation.

RATIONALE

Securing a low carbon, sustainable economic recovery will require us to transform the way we generate energy. Whilst some of this will be done at the national level, we must also support new low-carbon energy infrastructure opportunities, such as those presented in the Tri-LEP Energy Strategy. We will focus on supporting opportunities that allow more of our energy to be produced locally and from renewable sources and increasing the number of new developments supplied by local energy centres and district heating schemes.

OUTCOME

The county is an exemplar for renewable energy generation; producing more low carbon energy than it consumes and stimulating enhanced renewable energy supply chain opportunities that will support a green recovery.

HIGH LEVEL ACTIVITIES

| | |
|--|---|
| DO NOW | <p>Install roof-top solar panels on all suitable public sector buildings.</p> <p>Support residents and small businesses to install roof-top solar panels, by offering a group purchasing scheme such as Solar Together Kent.</p> |
| SHORT TERM (BY 2023) | <p>Undertake a renewable electricity and heat energy generation opportunities study for Kent and Medway. The study will build on existing knowledge and focus on all existing and emerging technologies including solar, wind, nuclear, heat pumps, district heating and green gas such as hydrogen.</p> |
| FOR LONGER TERM CONSIDERATION (BY 2030) | <p>Develop a joint Future Energy Investment Programme for Kent and Medway looking at:</p> <ul style="list-style-type: none"> • hydrogen • green gas • decentralised energy in new developments • community energy generation • other emerging energy technologies. |



PRIORITY 8: GREEN INFRASTRUCTURE

Develop a multi-functional, natural capital opportunity and investment programme – focusing on environmental projects that store carbon, increase climate change resilience, improve air quality and soil health and increase biodiversity.

RATIONALE

Soil, trees, hedgerows, grassland, wetlands and maritime habitats all store carbon, so improving land management practices and increasing coverage of these habitats will be essential if we are to achieve our net-zero target. In addition, our actions to increase carbon storage can also support our efforts to respond to the ecological emergency, support the Kent Biodiversity Strategy and increase resilience to climate change. The development of an opportunity and investment programme will ensure resources can be targeted at the most appropriate projects, capable of generating the most benefits.

OUTCOME

There is increased capacity for Kent and Medway’s natural environment to store carbon and offset the county’s greenhouse gas emissions: bringing additional benefits such as reduced air and water pollution, increased flood storage capacity, improved biodiversity and providing health, cultural and leisure opportunities for local communities.

HIGH LEVEL ACTIVITIES

| | |
|--|--|
| DO NOW | <p>Identify natural environment ‘quick-wins’ and areas where tree establishment is needed, especially in relation to Ash Dieback.</p> <p>Produce tree planting guidance to ensure the right tree species are planted in the most appropriate places.</p> |
| SHORT TERM (BY 2023) | <p>Assess the carbon and resilience value of natural capital in Kent and Medway, together with other potential functions.</p> <p>Scope develop and implement a multi-functional, natural capital opportunity and investment programme.</p> |
| FOR LONGER TERM CONSIDERATION (BY 2030) | <p>Expand the natural capital opportunity and investment programme to include all sectors.</p> |



PRIORITY 9: SUPPORTING LOW CARBON BUSINESS

Develop and implement a Kent and Medway business recovery and support programme to cut costs and win new business.

RATIONALE

The coronavirus pandemic has had a significant impact on local businesses and many will need support to recover. In addition, whilst many local businesses have already taken action to save money and reduce their impact on the environment, our evidence shows that this activity needs to be expanded and rapidly accelerated if we are to achieve our low carbon vision. A dual pronged approach to local business support, which utilises the considerable purchasing power of Kent and Medway’s public sector and supports businesses to reduce their environmental impact will help drive a low carbon economic recovery.

OUTCOME

Greenhouse gas emissions from local small and medium sized enterprises are reduced and businesses are supported to make the most of the economic opportunities that arise as we transition to a low carbon economy.

HIGH LEVEL ACTIVITIES

| | |
|--|---|
| DO NOW | <p>Support public sector suppliers to complete Steps to Environmental Management (STEM) training (or equivalent), in order to identify supply chain emissions and drive efficiencies where possible⁷</p> <p>Promote and refer businesses and supply chain to LOCASE, for support and access to grant funding to reduce their costs and access new markets.</p> |
| SHORT TERM (BY 2023) | <p>Conduct public sector supply chain assessments, focusing on the largest suppliers.</p> <p>Undertake a supply chain analysis of the economic opportunities from the low carbon sector across Kent and Medway (funded through SELEP).</p> <p>Require public sector suppliers to undertake STEM or a similar scheme.</p> <p>Working in partnership with local authorities and the Kent and Medway Economic Partnership, develop a targeted business support supply chain programme for the Kent and Medway public sector, building on LOCASE.</p> |
| FOR LONGER TERM CONSIDERATION (BY 2030) | <p>Develop local supply chain, low carbon clusters or opportunities (dependent on supply chain analysis).</p> |

⁷ The STEM accreditation scheme was developed through Low Carbon Across the South East (LOCASE) and is free to members of the Low Carbon Kent business network. It helps businesses improve their environmental performance through a series of assessments and certificates (blue, silver and gold), which correspond to National Standard BS 8555.



PRIORITY 10: COMMUNICATIONS

Develop a comprehensive communications, engagement and behaviour change programme targeted at residents, employees, businesses and visitors.

RATIONALE

We will not tackle the climate emergency through technology alone: our net-zero future will only be achieved if we successfully change perceptions, behaviour and social norms. Despite a recent surge in public interest in climate change there remain many psychological, social and cultural barriers to behaviour change, alongside a lack of physical capability or opportunity. These barriers are compounded by many competing voices seeking to advance their own part of the environmental agenda. We will need to work closely with our partners to develop simple, tailored and targeted communications that raise awareness and encourage a change in perceptions and behaviour.

OUTCOME

Residents, employees, businesses and visitors to Kent and Medway understand how their actions impact the environment; are aware of the risks of climate change and poor air quality; appreciate the value of the natural environment; and are sufficiently well informed and motivated to adopt more sustainable and low carbon behaviours. This increased awareness and engagement increases the impact of the other programmes developed through this Strategy.

HIGH LEVEL ACTIVITIES

| | |
|---------------------------------|---|
| DO NOW | Link up existing stakeholder communications and agree shared messages on topics such as air quality, fuel poverty, active travel and energy efficiency. Use the Kent Environment Strategy Conference as a mechanism to raise the profile of local authority collective action. |
| SHORT TERM (BY 2023) | Develop a joint communications, engagement and behaviour change strategy and programme for residents, public sector staff and businesses. Monitor effectiveness of campaigns and develop into targeted behaviour change programmes. |

CASE STUDY: ELECTRIC BUS TRIAL

In March 2018, Kent took part in an eight-week electric bus demonstrator trial commissioned by Volvo Bus UK and ABB UK. The trial aimed to demonstrate to Kent County Council, Prologis and Arriva (the bus operators), that electric buses can be operational without disrupting current schedules, whilst also improving air quality, energy efficiency, noise and passenger comfort, as well as providing financial benefits. The trial was conducted along the 23.6km-long 'Fastrack Route A', operating 20 hours daily between Dartford and Bluewater.

Data gathered from the trial showed that an energy saving of 69.3% could be realised on the Fastrack Route A (based on the annual energy use of current diesel buses; 2,063MW, versus the energy used by the bus on the trial; 634MW). Feedback from Arriva was positive, with the electric bus outperforming expectations and the drivers reporting that they preferred the electric vehicles. The public were also complimentary, with 70% of Twitter comments being neutral or positive.

The demonstration proved that the vehicle operated within Fastrack's operational requirements. It also helped promote the drive towards zero emissions technology and whilst the vehicle itself drew attention, the visual element of the charging infrastructure proved to be much more effective and thought provoking for the general public and stakeholders alike.



CASE STUDY: LOW CARBON ACROSS THE SOUTH EAST

The Low Carbon Across the South East (LoCASE) project provides free support to help businesses become more competitive and profitable, by reducing environmental impacts through resource efficiencies and encouraging low carbon innovation. It does this through a three-pronged approach of stimulating demand, supporting supply and transferring knowledge. The scheme is administered by Kent County Council and supports businesses in Kent and Medway, Essex, Thurrock, Southend-on-Sea and East Sussex.

So far the project has seen nearly £3.5 million of EU grant funding approved for 425 Kent and Medway Small and Medium Sized Enterprises (SMEs), towards a huge range of purposes. This investment is set to deliver over 4,000 tonnes of carbon dioxide equivalent of savings through 250 energy and resource efficiency projects; from simple lighting, heating and insulation works, to investing in more effective and sustainable business practices. To date this support has helped create 160 jobs, launch 45 new products or services and support 31 business start-ups in Kent and Medway's burgeoning Low Carbon Environmental Goods and Services sector.

It was due to this success that LoCASE was identified as an exemplar project for replication across the south east in the Energy South2East regional local energy strategy. It was also selected as a runner-up by the President of the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) Awards in 2018.

The project will continue to administer additional funding up to a value of £49 million to support businesses in the South East, in addition to expanding delivery into the neighbouring Local Economic Partnership (LEP) areas of Coast to Capital, Enterprise M3 and the Solent. This will open up access to LoCASE support to any SME based in Kent, Medway, Essex, Surrey, Hampshire and the Solent.

HOW WE WILL DELIVER THIS STRATEGY

The Kent and Medway Energy and Low Emissions Strategy sets out how we will respond to the UK climate emergency and ensure our recovery from the coronavirus pandemic drives clean and resilient economic growth, eliminates poor air quality, reduces fuel poverty, and promotes the development of an affordable, clean and secure energy supply across Kent and Medway. Building on the strengths and activities of local authorities and their partners, the strategy identifies ten high level priorities for action now and in the short- and long-term.

The strategy is owned by all 14 Kent and Medway local authorities, but the actions will need to be taken in partnership with other public and private sector partners, academic and charitable organisations. In addition, the strategy will develop programmes that will require the support of local businesses, community groups and residents if they are to be successful.

A technical implementation plan accompanies this strategy and provides detailed information on the specific actions that will be taken to achieve each priority, the partners involved, timescales and outputs. Progress, risks and issues will be regularly reviewed by Kent Leaders, Kent Chief Executives and appropriate partnerships. Progress reports and the latest indicators will be published online at www.kent.gov.uk/environment.

The Energy and Low Emissions Strategy is a sub-strategy of the Kent Environment Strategy and is intrinsically linked to several other strategic documents and policies across Kent. These are shown in Figure 4.

| | |
|-------------|---|
| Regional | Energy South to East: Local Industrial Strategy |
| | Local Economic Plan and Strategic Economic Statement |
| | Transport Strategy for the South East |
| County wide | Environment Strategy |
| | Growth and Infrastructure Framework |
| | Biodiversity Strategy |
| | Local Transport Plan |
| | Active Travel Strategy (excluding Medway) |
| | Health and Wellbeing Strategy |
| | Joint Strategic Needs Assessment |
| | Fuel Poverty Strategy |
| | Housing Strategy |
| | Enterprise and Productivity Strategy (in development) |
| | Sustainability and Transformation Plan |
| Local | Local Plans |
| | Covid-19 recovery plans |
| | Green Infrastructure Strategies |
| | Sustainable School Travel Strategy (Medway only) |
| | Walking and Cycling Strategies |
| | Air Quality Management Area Strategies |

Figure 4: Key strategies linked to the Kent and Medway Energy and Low Emissions Strategy

MEASURING PROGRESS – OUR INDICATORS

To ensure our activities remain effective, it is essential that we monitor and evaluate progress against our priorities regularly. To do this we will establish and monitor the following key indicators; ensuring that they remain measurable over the lifetime of this strategy. These indicators will be monitored quarterly (as they are updated) and published online.

| THEME | INDICATOR | BASELINE |
|--------------------------|--|---|
| Carbon dioxide emissions | Total carbon dioxide (CO ₂) emissions | 8,958.2 kilo tonnes of CO ₂ (2017). Total CO ₂ emissions have fallen by 37% since 2005. |
| | Per capita carbon dioxide (CO ₂) emissions | 4.9 tonnes per person (2017). |
| Air quality | Annual exceedance of key air pollutants | 2 site failures for NO _x and 2 site failure for O ₃ (2018). |
| | Number of days of moderate or higher air pollution | 78 days (21.3% of the year), where at least one pollutant recorded levels of moderate or higher air pollution (2018). |
| | Deaths associated with particulate matter (PM2.5) | 922 deaths associated with particulate matter (2017). |
| | Number of air quality management areas | 43 air quality management areas (2019). |
| Green infrastructure | Tree canopy coverage | To be developed |
| | Carbon storage value of habitats | To be developed |
| Energy | Annual energy consumption of local authority estate (all 14 councils) | To be developed |
| | Average domestic energy consumption (gas and electricity) per customer | 16,781 kilowatt hours (2017). |
| | Carbon emissions from gas and electricity consumption | 4.87 Mega tonnes CO ₂ (2017). |
| | Renewable electricity generation | 1,751 Mega Watts (2018). |

| | | |
|--------------------|--|---|
| Transport | Carbon emissions from the transport sector | 3,953.7 kilo tonnes of CO ₂ (2017). |
| | Active travel to school (walking, cycling, scooting) | 64.2% of primary school children. 36.6% of secondary school children (2018). |
| | Active travel to work (census data – updated every 10 years) | In 2011, 32% of people that work within 5km of their home actively travelled to work in Kent. |
| | Journey delays on local A-roads (excluding Medway) | 35.4 seconds per vehicle per mile (2018). |
| | Journey delays on local A-roads (Medway only) | 46.9 seconds per vehicle per mile (2018). |
| | Electric Vehicle Registrations | 4,845 electric vehicle registrations (December 2019). |
| | Road transport fuel consumption | 1,182,943 tons of oil equivalent. |
| | Number of car share / car clubs in operation | To be developed |
| | Kilometres of footpath/cycle lane improved | To be developed |
| Housing and health | Households in fuel poverty | 73,010 (9.6%) households in fuel poverty (2017). |
| | Excess winter deaths | 1,610 excess winter deaths 29.6% averaged excess winter mortality (2017/18). |
| | Carbon emissions from the domestic sector | 2,585.9 kilo tonnes of CO ₂ (2017). |
| | Household water consumption | To be developed |
| | Energy Performance Certificate (EPC) rating of homes | 83% of new builds had an EPC rating of A or B (2018). 16% of all domestic EPC lodgements were rated A or B for energy efficiency (2018). |
| | Number of energy efficiency measures installed in homes | To be developed |

GLOSSARY

Active travel - Travel and transport by physically active modes of transport such as cycling, walking or scooting.

Air quality - The composition of the air in terms of how much pollution it contains.

Air Quality Management Areas (AQMAs) – Where Local Authorities have found that air pollution objectives have been exceeded or are not likely to be achieved, an Air Quality Management Area must be declared. The size of these areas is not predefined and can vary.

Department for Business, Energy and Industrial Strategy (BEIS) – Formed in 2016 The Department for Business, Energy and Industrial strategy is a government department responsible for business, industrial strategy, science and innovation and energy and climate change policy.

Car club – Car clubs allow you to rent a car by the hour. Car clubs offer the benefits of using a car without the expense or inconvenience of maintaining and running your own car.

Clean energy – Energy that is not produced from fossil fuels (coal, oil or natural gas)

Clean growth – set out in the Government’s Clean Growth Strategy, the concept aims to lower carbon emissions, protecting the environment and meeting

our climate change obligations, whilst stimulating growth and prosperity, increasing earning power and creating and supporting thousands of jobs.

Combined Heat and Power (CHP) - When electricity is generated, up to 60% of the energy can be wasted as lost heat. Combined Heat and Power schemes are designed to recover most of this waste heat and use it to power a turbine and generate more electricity.

Department for Environment, Farming and Rural Affairs (DEFRA) – Formed in 2001, the Department for Environment, Food and Rural Affairs is the government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities in England.

District heating - A district heating system is a network of insulated pipes, which delivers heat (or chilled water) from a centralised energy centre to multiple end users [see also Heat Network].

Energy Performance Certificate (EPC) - EPCs are intended to inform potential buyers or tenants about the energy performance of a building, so they can consider energy efficiency as part of their investment or business decision. The scale is from A-G, A being the most efficient.

Energy switching – a process carried out by consumers aiming to reduce their energy bills by changing their energy provider.

Excess Winter Deaths – is defined as the difference between the number of deaths which occurred in winter (December to March) and the average number of deaths during the preceding months (August to November) and the subsequent four months (April to July).

Flexible working - Flexible working is a way of working that suits an employee’s needs, for example having flexible start and finish times, or working from home.

Fuel poverty - Fuel poverty in England is measured by the Low Income High Costs definition, which considers a household to be in fuel poverty if they have fuel costs that are above average (the national median level) and where if they were to spend that amount, they would be left with a residual income below the official poverty line.

Geographic Information Systems (GIS) – A computer system that allows analysis of spatial data by organising layers of information into visual maps and 3D scenes. Commonly used GIS applications are ArcGIS and MapInfo.

Greenhouse gases - As defined under the Kyoto Protocol, these include:

Carbon dioxide (CO₂) Methane (CH₄) Nitrous oxide (N₂O)

Hydrofluorocarbons (HFCs) Perfluorocarbons (PFCs) Sulphur hexafluoride (SF₆)

Green infrastructure - Green infrastructure is a network of multi-functional green space, both new and existing, both rural and urban, which supports the natural and ecological processes and is integral to the health and quality of life of sustainable communities.

Growth and Infrastructure Framework – prepared by Kent County Council to provide a view of emerging development and infrastructure requirements to support growth across Kent and Medway. It provides a strategic framework across the County, for identifying and prioritising investment across a range of infrastructure, for planned growth up to 2031.

Hard-to-treat homes – homes that cannot accommodate routine, cost-effective energy efficiency measures. Homes considered hard-to-treat are often not connected to the gas network or are built with solid walls (without a cavity); this includes older properties and park homes.

Heat networks - A heat network, sometimes called district heating, is a distribution system of insulated pipes that takes heat from a central source and delivers it to a number of domestic or non-domestic buildings. The heat source might be a facility that provides a dedicated supply to the heat network, such as a combined heat and power plant; or heat recovered from industry and urban infrastructure, canals and rivers, or energy from waste plants.

Local Enterprise Partnership (LEP) – LEPs are locally owned partnerships between local authorities and

businesses. They play a central role in determining local economic priorities and undertaking activities to drive economic growth and the creation of local jobs.

Low Carbon Across the South East (LoCASE) – An EU funded project set up to help businesses tackle and adapt to climate change, by aiming to reduce costs by cutting emissions and promoting the opportunities of the low carbon and environmental goods and services market.

Low carbon economy - An economy which has a minimal output of greenhouse gas emissions.

Mega Watt (MW) - a measure of power, one million watts.

Net-zero – Achieving net-zero carbon emissions by deeply cutting emissions, with remaining emissions offset by removal from the atmosphere (eg. by trees or technology).

Renewable energy - Energy produced using naturally replenishing resources. This includes solar power, wind, wave, tide and hydroelectricity. Wood, straw and waste are often called solid renewable energy, while landfill gas and sewerage gas can be described as gaseous renewables.

Small and Medium Sized Enterprises (SMEs) - Micro, small and medium-sized enterprises who employ fewer than 250 people and which have an annual turnover of less than £25 million.

Superfast broadband - In the UK, 'superfast' broadband is defined as a connection with download speeds of 24Mb or above.

Sustainable development - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is central to the economic, environmental and social success of the country and is the core principle underpinning the National Planning Policy Framework.

Tri-LEP – A term used to describe collaboration between the South East, Coast to Capital and Enterprise M3 Local Economic Partnerships. The Tri-LEP area covers much of south east England including Kent, Sussex, Surrey, Hampshire and Essex.

Ultra-Low Emission Vehicles (ULEVs) – Ultra low emission vehicles (ULEVs), also known as plug-in vehicles, emit extremely low levels of motor vehicle emissions compared to traditional petrol or diesel vehicles.

Vulnerable resident – A term for an individual who is at risk of harm due to life circumstances such as being homeless, frail or elderly or has a mental or physical illness.

KENT AND MEDWAY ENERGY AND LOW EMISSIONS STRATEGY

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WWW.KENT.GOV.UK/ENVIRONMENT

This document is available in alternative formats and can be explained in a range of languages. Please contact alternativeformats@kent.gov.uk



Cleaner and Greener Work Plan 2019/20 (as at 25/11/2020)

| 9 December 2020 | 19 January 2021 | 16 March 2021 | Summer 2021 |
|---|--|--|-------------|
| <p>Fly tipping model</p> <p>Kent Nature Partnership Biodiversity Strategy</p> <p>Net Zero 2030: Carbon Emissions and Kent Energy and Low Emission Strategy</p> <p>Service Update: Licensing Partnership</p> | <p>Air Quality</p> <p>Net Zero 2030: Carbon Emissions Update</p> <p>Service Update: Environmental Health</p> | <p>10-year Vehicle & Equipment Replacement Programme</p> | |

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