



Buckinghamshire Local Nature Recovery Strategy Pilot

APPENDIX 7: Environmental Data used in the production of the Bucks LNRS pilot

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Refined “long list” and how that data wasError! Bookmark not defined.

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Introduction

- The LNRS Pilot Area Team (the “PAT”) put together early on in the pilot LNRS process a list of data to be considered for use.
- The PAT considered the list and agreed an initial sifting to select which data should be taken forward for further consideration for use in the LNRS process: whether to inform the baseline mapping, and/ or to help inform consideration of biodiversity priorities and opportunities / to inform stakeholders.
- This sifting took account of appropriateness and relevance of the data to the LNRS steps process.
- The PAT-produced list of data sources and information that PAT wanted considered for use in the various stages and outputs of the Bucks LNRS is shown below in the Table.
- The list was provided to a Mapping Working Group, which was formed to review the data and consider which / how best incorporate it into a series of baseline maps to show the key baseline environmental information for Buckinghamshire.
- In producing the maps, the mapping working group reviewed the list and further took account of practicalities such as capacity and ease of sourcing data in the time available, possible data overlaps and which data would provide the best / most accurate / up-to-date information in the time available.
- It was intended that the baseline maps could be used as background information for stakeholder engagement process; to help decisions around the baseline map for the pilot LNRS; and to include in a technical document in the final pilot LNRS outputs.
- All the baseline / background maps are reproduced in the Technical Appendix 7.
- The other information and data sources put forward by the PAT was sourced, as far as possible, for use in the later SCP mapping analysis to help produce the pilot LNRS “local habitat map”.
- The Table below shows, for each PAT-suggested information or data source whether or not it was made use of in the pilot LNRS process. If it was, details are also provided as to whether it was used in the i) background / baseline mapping; ii) in the background information to help inform stakeholders prior to stakeholder engagement to summarise the current situation; and/or iii) in the SCP modelling to produce the map of nature recovery priorities geographically.
- The Table also provides explanations where data was not able to be used in the pilot process.

1. The Pilot Area Team’s original “Long list” of suggested environmental data; and whether / how this was used in the pilot LNRS

(NB: See Appendix 1 for the description of all baseline maps and associated detailed data sources and citations).

Table: Environmental data considered and used for the Buckinghamshire LNRS pilot.

	Environmental data considered	Description	Data owner & citation (where used in pilot)	Used in the LNRS process? (Y / N) If N, brief explanation	If Y...		
					How was this used in the LNRS pilot?		
					Baseline mapping (Appendix 7)	Background info for stakeholders	Mapping (SCP) process
1	See Appendix 1 for the baseline maps data sources:	See Appendix 1	See Appendix 1				
	i. Broad habitats baseline			Y	Y	Y	Y
	ii. High quality habitats			Y	Y		
	iii. Priority habitats		Combination of BMERC and Natural England Priority Habitat Data	Y	Y	Y	Y
	iv. Designated sites			Y	Y	Y	Y
	v. Ancient woodland (NFI, ASNW, PAWS)			Y	Y	Y	Y

	vi. Geology of Buckinghamshire (solid and draft) and Local Geology Sites			Y	Y	Y	
	vii. National soils data			Y	Y		
	viii. National Character Areas covering Buckinghamshire			Y	Y	Y	
	ix. Conservation-related boundaries (water catchment boundaries, AONB, nature reserves managed by local conservation charities)			Y	Y	Y	Y
	x. Water environment: ecological status of water bodies				Y	Y	

2	Ecosystem services – demand and supply maps	<p>These ecosystem services maps show the benefits that the habitats of Buckinghamshire provide to people.</p> <p>For every service assessed, the capacity of the natural environment to delivery it (the current supply) was mapped. Local demand (the beneficiaries) for certain services was also mapped – for air purification, noise regulation, local climate regulation and accessible nature. NB the importance and value of ecosystem services can often be dependent on its location in relation to demand for that service. But demand was not mapped where there was no obvious method to apply, or local demand is not relevant (e.g. food and timber production).</p> <p>The following ecosystem services (below) were assessed in the NC mapping project for Buckinghamshire:</p>	<p>Mapping Natural Capital, Ecosystem Services and Opportunities for Habitat Creation in Buckinghamshire” Jim Rouquette, Natural Capital Solutions (2020). Report available at: https://bucksmknep.co.uk/projects/natural-capital-mapping/</p> <p>See Section 3, Modelling and mapping ecosystem services (physical flows) for further explanation and the data and modelling used for each service, alongside the baseline habitat data.</p>	Y- provided in full technical appendix 2 of the final pilot LNRS product.	Y	Partially – maps not included by some descriptions used	Y (partially)
		i. Baseline carbon storage capacity			Y		Y
		ii. Carbon sequestration capacity			Y		Y
		ii. Air purification capacity			Y		
		v. Air purification demand			Y		
		v. Noise regulation capacity			Y		
		vi. Noise regulation demand			Y		
		ii. Local climate regulation capacity			Y		
		ii. Local climate regulation demand			Y		
		x. Water flow regulation capacity			Y		
		x. Water quality regulation capacity			Y		

		xi. Food production capacity			Y		
		ii. Timber / woodfuel capacity			Y		
		ii. Accessible nature capacity			Y		Y
3	Further woodland data	<ul style="list-style-type: none"> • Low Risk Woodland Creation map; • Carbon sequestration potential maps (combines info on planting yields with sequestration. Shows likely C-sequestration from planting woodland in different places); Woods into active management 2020 maps • Woodland priority habitats network (used to identify where woodland creation improves connectivity) • Canopy cover (e.g. Urban Tree Challenge Fund identifies areas devoid of canopy cover below 15%) • FC Woodland basemap • Woodland Habitat Network 	<p>Woodland Habitat Networks (open source dataset is called CS - woodland priority habitat network) – Dataset and full description: https://data.gov.uk/dataset/3137ee45-6763-4d50-8d4a-d9b9860e8f5e/countryside-stewardship-scoring-woodland-priority-habitat-network-england-2016-2017 Contains OS data © Crown copyright 2017</p> <p>Actively Managed woodland - Dataset and full description: https://data.gov.uk/dataset/d5719d76-7406-4b70-b9a4-8eafc396f747/managed-woodland-headline-performance-indicator-england-30-june-2017 © Crown copyright 2017. Ordnance Survey Licence number 100021242. Attribution statement: Contains OS data © Crown copyright 2017</p>	<p>Used in SCP: Higher priority woodland creation area (source: Forestry Commission Woodland Habitat Networks)</p> <p>Unmanaged woodland (source: Forestry Commission 'Buck_Actively_Managed map')</p> <p>Actively managed woodland- Grants (source: Forestry Commission 'Buck_Actively_Managed map')</p>			Y (partially)
4	Carbon soil storage data	Can be important for identifying opportunity areas for different habitats – e.g. well-managed grassland, which could otherwise appear carbon-neutral due to grass being harvested every year.	<p>Soil organise carbon map: http://www.landis.org.uk/data/nmcarbon.cfm</p>	<p>N</p> <p>Capacity to pursue in time available</p>			

5	Important Freshwater Areas	Modelling to identify areas to improve water habitats	Freshwater Habitats Trust	Y – although only available for Thames areas at time of pilot; other areas unavailable; also not all available in GIS format and lack of capacity in timeline to work up.			Y
6	Species data (e.g. risks and opportunities data)	Birds	British Trust for Ornithology (BTO) data – e.g. from the bird atlas / breeding bird data	N Ideally would use suite analysis to make sense of all species data; lack of data / capacity to pursue at time of pilot; some datasets still in development / unavailable at time of pilot			
		Butterflies and moths	Butterfly Conservation’s – “important areas”	N – as above			
		B-Lines	Buglife- for more info see https://www.buglife.org.uk/our-work/b-lines/	N Considered for SCP, but not included as questionable			

				reflection of stakeholder priorities			
		Great Crested Newts Conservation priority zones	Naturespace Newt Partnership	N Considered for SCP, but not included as questionable reflection of stakeholder priorities			
		Mammals	Mammal society data	N – as above for “species data”			
		Invertebrates	Buglife	N – as above for “species data”			
		Plants / habitats	e.g. Plantlife Important Plant Areas	N Considered for SCP, but not included as questionable reflection of stakeholder priorities			
7	Natural Capital Opportunity Mapping for Buckinghamshire –	Biodiversity-prioritised combined opportunity mapping – looking at where to locate habitats first (for new woodland, semi-natural grassland and new wetland habitats); and also deliver multiple, broader benefits.	Mapping Natural Capital, Ecosystem Services and Opportunities for Habitat Creation in Buckinghamshire” Jim Rouquette, Natural Capital Solutions (2020). Report available at: https://bucksmknep.co.uk/projects/natural-capital-mapping/	Data used in SCP: Opportunities to: <ul style="list-style-type: none"> • reduce surface runoff • reduce soil erosion and improve water quality 			Y

				<ul style="list-style-type: none"> • ameliorate air pollution • regulate local climate (reduce urban heat) • increase access to natural greenspace 			
8	The NEP's Biodiversity net gains opportunity maps	NEP's expert working group's recent mapping work to identify priority locations for biodiversity offsets based on Biodiversity Opportunity Areas, buffers around them and connectivity between them (taking account also of the NEP's GI opportunity zones mapping – see item 14, below).	Bucks & MK Natural Environment Partnership (the "NEP"). Priority Offsetting Mapping Report (2021). Accessed (May 21) from: https://bucksmknep.co.uk/biodiversity-accounting/ And the specific map here: https://bucksmknep.co.uk/download/3052/	N Considered in SCP, but we decided to only use BOAs in their raw format			
9	Water: catchment priorities	Set of actions to address pressures on water environment and improved ecological status.	Various (e.g. Catchment Partnerships and Environment Agency)	N Not readily available in correct format or for whole of Bucks at this stage (e.g. river basin management plans – varying resolution; catchment plans –			

				not all consistent, or have received EA advice, up-to-date; EA's draft catchment habitat restoration strategies not yet finalised / available) Would like to pick up in post-pilot LNRS.			
10	Priority habitat restoration areas (PAT had suggested grasslands and wetlands data, included here in lines 10 and 11)	<p>This is a spatial dataset that describes the geographic extent and location of Habitat Networks for 18 priority habitats based, primarily, but not exclusively, on the priority habitat inventory with additional data added in relation to habitat restoration-creation, restorable habitat, plus fragmentation action, and network enhancement and expansion zones.</p> <p>The maps are created following a standardised process that incorporates a range of data layers and identifies specific locations for a range of actions to help improve the ecological resilience for each of the habitats/habitat networks. This is the combined habitat network map. This updated dataset replaces the two previous published layers 'Habitat Networks (Combined Habitats (England)' and 'Habitat Networks</p>	<p>Natural England Habitats Networks data and mapping:</p> <p>Lowland fens (LFN)</p> <p>Purple moorgrass and rush pasture (PMG)</p> <p>Reedbeds (RDB)</p> <p>Lakes (LAK)</p> <p>Lowland heathland (LHL)</p> <p>Lowland acid grassland (LAG)</p> <p>Lowland calcareous grassland (LCG)</p> <p>Lowland meadows (LMW)</p> <p>Ancient Woodlands (ANSW)</p>	<p>Y</p> <p>(Not used in baseline mapping as the working group was concerned the maps would preempt the results of the data-led approach for identifying priority nature recovery areas in Bucks).</p> <p>Used in the SCP analysis - to show where priority habitats can be</p>			Y

		<p>(Combined Habitats) (England) Priority Restoration.</p> <p>The Habitat Networks (England) comprise a series of 23 individual habitat network maps for England plus a single 'Combined Habitat Networks Map' and 3 'Grouped Habitat Networks Map'. The habitat network maps seek to apply the best evidence and principles and to use the best available nationally consistent spatial data.</p> <p>For more information see: https://naturalengland-defra.opendata.arcgis.com/datasets/fceb93850462454ab3fb5acce2be35b00?geometry=-16.052%2C50.521%2C11.699%2C55.161</p>	<p>Wood-pasture & parkland (WPP)</p> <p>Traditional orchards (TRO)</p> <p>Available via: https://naturalengland-defra.opendata.arcgis.com/datasets/fceb93850462454ab3fb5acce2be35b00?geometry=-16.052%2C50.521%2C11.699%2C55.161</p> <p>Further information and mapping is available at: https://data.gov.uk/dataset/0ef2ed26-2f04-4e0f-9493-ffbdbfaeb159/habitat-networks-england</p>	<p>created – used as an opportunity map for the 'restore or recover' zone.</p>			
11	Wetlands	As above	Natural England Habitats Networks data (as above)	N			
12	Natural Flood Management (NFM) opportunity maps	The NFM Opportunity and Priority Map allows partners to look at potential areas for Natural Flood Management (NFM) on a catchment scale. It will help guide Lead Local Flood Authorities (LLFAs) and other Risk Management Authorities (RMAs) towards potential sites for NFM. The NFM Opportunity map shows a range of possible NFM features including leaky dams, storage basins, bunds, woodland planting, gully blocking, riparian buffers and floodplain	Environment Agency	N	Coverage availability - only available for Thames catchment at time of collating data for the pilot		

		<p>reconnection with the aim of assisting Local Authorities scope for NFM before investing in costly site specific surveys.</p> <p>The Priority map, ranking waterbody catchments, is based on the number of homes at risk and the total area of NFM opportunity. The Priority Map has layers for 1 in 30 and 1 in 100 events as well as multiple benefits that can be achieved using NFM, which include improving water quality, ecological improvements, and cultural improvements</p>				
13	Land in environmental schemes	<p>Where schemes are due to come out of a scheme in the next few years, this could post opportunities for nature's improvement.</p> <p>Considered:</p> <ul style="list-style-type: none"> • Woodland in Active Management Grant Scheme (Forestry Commission); • Environmental Stewardship (Defra) • Online FC Land Information search – for anyone planning to undertake forestry activities, to aid with their planning and stakeholder engagement • Anyone who has an interest in forestry or woodland management activity in their area, and who 		<p>N</p> <p>Woodland in Active Management: (Timely availability in right format)</p> <p>Stewardship: Capacity to sift through specific scheme details to identify time period left for each stewardship agreement. Something for a future LNRS.</p>		

		wants reassurance that the work is legitimate.		Online searches: capacity and time constraints prevented this.			
14	NEP's environmental opportunity mapping	<p>i. Green Infrastructure opportunity zones - map and accompanying document.</p> <p>Expert-led identification of zones of the greatest GI opportunity across Bucks based on consideration of:</p> <ol style="list-style-type: none"> 1) <u>Current GI location and value</u> <ul style="list-style-type: none"> • baseline data (combining a multitude of data sources identifying on existing habitats, water sources and access) • flooding risk and impact data • areas of multiple deprivation • water quality data • constraints such as earmarked development and areas of growth, infrastructure (existing and planned) -e.g. main roads, rail, etc. • BOAs and AONB 2) <u>Known characteristics of GI across the NEP area</u>, needs and threats facing it – to identify broad 'zones'; and 3) <u>Expert stakeholder views of the specific GI opportunities</u> posed in each zone. 	<p>Buckinghamshire and Milton Keynes Nature Environment Partnership (2018) Green Infrastructure Opportunities Mapping; and GI Opportunity Zones Map.</p> <p>For the map and the accompanying explanatory document, see https://bucksmknep.co.uk/projects/gi-opportunities-mapping/</p> <p>Available as a downloadable document or see the interactive map on the NEP website.</p>	N – data not available in correct format in time available			

		<p>The resulting zones are strategic-scale areas that have:</p> <ul style="list-style-type: none"> - similar characteristics and potential to enhance similar wider benefits; - contain established networks of GI or potential for increasing its effectiveness; - face common threats or challenges; and - are areas of focus for concreting and/or maintaining larger resilient networks and hubs of GI. <p>Each zone, therefore, has either specific large-scale, broad areas of <u>needs for GI, and/or provides specific large-scale opportunities in the future for GI to provide wider benefits to landscape, wildlife, water and people.</u></p>					
		<p>ii. Bucks-and MK-only mapping showing Growth Arc environmental opportunities (based on GI opportunity zones, but with a more strategic view).</p>	<p>NEP's map for Bucks and MK was input into broader discussions around the major landscape-scale environmental opportunity zones across the OxCam Growth Arc. Available on the NEP's website: https://bucksmknep.co.uk/projects/doubling-nature/</p>	N			
15	Constraints and features to take into account in	- Local Plan - earmarked development, housing and other;	Buckinghamshire Council	N – considered in SCP but agreed not enough time			

	opportunity mapping			to incorporate into the pilot			
		- Built-up areas (existing)	Buckinghamshire Council	N – considered in SCP but agreed not enough time to incorporate into the pilot			
		- Infrastructure - existing and planned (eg HS2, EWR)	Buckinghamshire Council	N – considered in SCP but agreed not enough time to incorporate into the pilot (also there were complications with these datasets that could not be resolved in the short time available)			
		- Minerals and waste sites;	Buckinghamshire Council	N – considered in SCP but agreed not enough time to incorporate into the pilot			
		- Green belt land	Buckinghamshire Council	N – considered in SCP, but not included as this area covers over 50% of the county			
		- Local Heritage layers: Scheduled Ancient monuments and Archaeological notification areas	SAMS – BMERC ANAs – BMERC	N – considered in SCP, but working group excluded data given time and resources			
		Registered Parks and Gardens	Parks and gardens – Heritage England				

				available; also not all parks and gardens could be deemed as being managed for biodiversity.			
		- Gas pipelines and overhead cables	National Grid	N – excluded from SCP as the area these cover would be tiny in comparison to the 5 ha planning units			
		- Land use constraints (infrastructure – roads, railways and paths; urban (all building) gardens and water (standing and running)	Taken from data used in the following report: Mapping Natural Capital, Ecosystem Services and Opportunities for Habitat Creation in Buckinghamshire” Jim Rouquette, Natural Capital Solutions (2020). Report available at: https://bucksmknep.co.uk/projects/natural-capital-mapping/ (see page 47)	N - considered for SCP, but there was not enough time to properly include these (big issues with data overlaps that would need to be resolved first)			
		Flood risk zone maps	Environment Agency	N - Capacity / time			
16	Habitat condition mapping	Commissioning of a process to assign known condition based on best available data to as many areas of Bucks as possible; and use of the Buckinghamshire data recorders to assist by recording the condition of as many local sites as possible, via an interactive map and short survey, based on judgement of the recorders.	Under way – but time and constraints mean this will not be complete in time for the pilot LNRS.	N – time and capacity. NB - Project is still running to ensure improved coverage of condition estimates across			

				Bucks - will be useful for the future(non-pilot_) LNRS and will yield lessons learned about the process; will also have many other uses beyond the LNRS.			
17	Habitat likely to be lost to earmarked development	Using latest Local Plan land allocations – identify area and type of habitats likely to be lost over the Local Plan period.	Bucks C and legacy Bucks District Councils	N Data not readily available in correct format for inclusion in timeframe; to pursue for later LNRS			
18	Biodiversity Opportunity Areas	BOAs are the regional priority areas of opportunity for the restoration and creation of Biodiversity Action Plan habitats. BOAs represent a targeted landscape-scale approach to conserving biodiversity and the basis for an ecological network. They have been identified in the NEP's Biodiversity Action Plan for Bucks and MK as the areas of greatest opportunity for habitat creation and restoration, enabling efficient focusing of resources where they have the greatest positive conservation impact. BOAs also	BMERC hold the data. The BOAs were developed by members of the South East Biodiversity Forum. Map of BOAs in Buckinghamshire and Milton Keynes is available on the NEP website, at: https://bucksmknep.co.uk/biodiversity-opportunity-areas/	Y			Y

		provide multiple benefits for the natural environment and for people.					
Other data sources that were originally put forward to consider for the LNRS							
19	Land Cover Map 2015	Land cover information for the UK, based on satellite images and digital cartography. Based on UK Biodiversity Action Plan Broad Habitats classes.	UK Centre for ecology and Hydrology Mapping and information available at: https://www.ceh.ac.uk/services/land-cover-map-2015	Y (already included in the baseline broad habitats map)	Y (see previous column)		
20	River basin management plans	River basin management plans (RBMPs) set out how organisations, stakeholders and communities will work together to improve the water environment. RBMPs are reviewed and updated every 6 years; a consultation on the drafted RBMPs is expected in 2021.	Defra and Environment Agency Further information available at: https://www.gov.uk/government/collect/river-basin-management-plans-2015	N – not yet available across Bucks for timely use in the pilot LNRS process			
21	River systems	Map of water courses (not type)	BMERC	N – investigated IFAs instead; (NB baseline mapping shows water catchments) For SCP - used the watercourses data from Broad			

				habitat types in Buckinghamshire (Rouquette, 2020) - see item 1, this Table			
22	Ponds			Y - Already included in basemap used from Natural Capital Solutions work for Bucks as a water feature (not identified as a pond)	Y (within broad habitats mapping, see item 1 above)		
23	Hedgerows			Y - included in NC mapping work – woody linear features (location not condition) were incorporated into the Bucks natural capital mapping completed by Natural Capital Solutions and used for the Bucks basemap.	Y (within broad habitats mapping data, see item 1 above)		
24	National Plant Monitoring Scheme	The NPMS is a habitat-based plant monitoring scheme carried out by volunteer surveyors nationwide. Data is collected to provide an indication of changes in plant abundance and diversity, and ultimately to help	BSBI, UKCEH, Plantlife and JNCC. Further information available at: https://www.npms.org.uk/	N – see “species data” above			

		<p>us to assess the health of our habitats.</p> <p>It was designed and developed by BSBI, UKCEH, Plantlife and JNCC.</p>					
25	Grassland coverage mapping	<p>Mapping by Warwickshire CC for the Bucks & MK NEP to map coverage of grassland across the county as part of the work with the NEP looking at priority areas for biodiversity offset locations</p> <p>(See number 8, above)</p>	<p>Bucks & MK Natural Environment Partnership (the “NEP”). Priority Offsetting Mapping Report (2021). Accessed (May 21) from: https://bucksmknep.co.uk/biodiversity-accounting/</p> <p>And the specific map here: https://bucksmknep.co.uk/download/3052/</p>	N – time / resource constraints			
26	Woodland coverage mapping	<p>Mapping by Warwickshire CC for the Bucks & MK NEP to map coverage of woodland across the county as part of the work with the NEP looking at priority areas for biodiversity offset locations</p> <p>(See number 8, above)</p>	<p>Bucks & MK Natural Environment Partnership (the “NEP”). Priority Offsetting Mapping Report (2021). Accessed (May 21) from: https://bucksmknep.co.uk/biodiversity-accounting/</p> <p>And the specific map here: https://bucksmknep.co.uk/download/3052/</p>	N – time / resource constraints			
27	National Forest Inventory of Trees (NFI)	<p>The National Forest Inventory (NFI) programme monitors woodland and trees within Great Britain. It includes the most in depth survey carried out on Britain’s woodland and trees to date. The NFI provides an extensive and unique record of key information about our forests and woodlands.</p>	<p>Forestry Research</p> <p>Further information available at: https://www.forestryresearch.gov.uk/TOOLS-and-resources/national-forest-inventory/</p>	Y – already included in the baseline habitat mapping provided by the Natural Capital Solutions natural capital mapping work for Bucks	Y		

				NB - not used in SCP as other woodland data was used (see above)			
28	Identify landowners engaged with the environment - e.g. Review of FC online land information searches	To identify stakeholders / landowners engaged with the environment – May help identify opportunity areas – those with an interest in forestry or woodland management activity	Forestry Commission	N – capacity in the timeline compared with other priorities.			
29	Species risks and opportunities maps	This project aims to fill an important gap in our evidence base by using the latest modelling techniques and analytical frameworks to explore how species are likely to change their distributions (and for migratory birds, their population sizes) as a result of climate change. Analysis was undertaken for 3,000 species of a wide range of terrestrial taxa (from vascular plants and bryophytes to spiders and beetles) and assesses the potential risks within their existing ranges as well as the opportunities that might be provided in new areas.	Natural England For more information, see: http://publications.naturalengland.org.uk/file/6325465464700928 This publication is published by Natural England under the Open Government Licence v3.0 for public sector information. You are encouraged to use, and reuse, information subject to certain conditions. For details of the licence visit For more information, see: http://publications.naturalengland.org.uk/file/6325465464700928	N – time / resources			
30	Climate Change Refugia Maps	The report was commissioned to identify the characteristics of potential refugia, to investigate	Natural England	N – time / resources			

		evidence for the existence of contemporary refugia. This was undertaken by analysing patterns of local persistence and disappearance of over 1,000 species across a range of taxa to identify sites in England with the potential to function as refugia for different taxonomic groups at a range of spatial scales; 100m resolution is now available.	For more information, see: http://publications.naturalengland.org.uk/publication/6659217335255040 This report is published by Natural England under the Open Government Licence - OGLv3.0 for public sector information. You are encouraged to use, and reuse, information subject to certain conditions. For details of the licence visit www.naturalengland.org.uk/copyright .				
31	Natural Capital Atlases: Mapping indicators for county regions	Best available and nationally-consistent evidence used to map out indicators showing asset quality, quantity and location. Indicators for some flows of ecosystem services are also mapped.	Natural England http://publications.naturalengland.org.uk/publication/6672365834731520	N – assumed recent and local Natural Capital mapping more locally-detailed and beneficial – esp resolution of ecosystem services			
32	Update to the Buckinghamshire NC baseline with new data gathered for the LNRS or more detailed data – e.g. soils data; and adding ANGST data to accessibility mapping; integrate newly-available NEP maps of net gain priorities into			N – time / capacity to undertake within the pilot LNRS timeline			

	NC opportunity mapping						
33	Review of similar local strategies to identify priorities			Y – some – but not enough time for a full review of all relevant strategies			
34	Accessible Natural Greenspace Standards in Towns and Cities (ANGSt) data	<p>ANGSt was developed in the early 1990s and was based on research into minimum distances people would travel to the natural environment.</p> <p>Natural England reviewed the standard in 2008 and concluded that it was still useful but that further guidance was required to explain how it should be applied.</p> <p>The Nature Nearby report published in 2010 provides this additional clarity. ANGSt recommends that everyone, wherever they live, should have accessible natural greenspace.</p>	<p>Natural England</p> <p>Further information available in NE's "Nature Nearby" publication (2010). Available at: https://webarchive.nationalarchives.gov.uk/20140605111422/http://www.naturalengland.org.uk/regions/east_of_england/ourwork/gi/accessiblenaturalgreenspacestandardangst.aspx</p>	<p>N – time-resource constraints to update underlying baseline data with full ANGSt data.</p> <p>NB - Natural Capital Solutions opportunity mapping used accessibility to green spaces data (see item 1, above)</p>			
35	MENE data	Interactions with nature and greenspace. Statistical model - estimates number of visitors and from different socio-economic groups, based on the survey data.	Natural England	N			
36	Agricultural land classification	A classification of agricultural land to help assess and compare the quality of agricultural land in England and Wales, using a combination of climate, topography and soil characteristics and their interaction. Land is graded 1 to 5. The highest	Further information is available at: https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land#about-alc-grades	Y (used to estimate opportunity cost for converting land to be managed for conservation)			Y

		grade (1) goes to land that gives a high yield or outputs, has the widest range and versatility of use, produces the most consistent yield and requires less input. The classification assists with planning and development decisions. The Government's 2018 Environment Plan sets out to protect the best agricultural land, value soils as part of natural capital and manage soils sustainability by 2030.					
37	Local / Environmental Character Areas	Provides more local context than NCAs	e.g. that of Aylesbury Vale DC in 2008; external review of biodiversity, historic environment and cultural and visual considerations to draw out local connections and specific areas – to help delivery of new planning policies and land management activities.	N – decided to use NCA area as information and data readily available and recently reviewed by the NEP's Biodiversity Action Plan working group.			
38	Habitat flow maps	Net gain work –to help identify linkages between BOAs: based on grassland and woodland coverage	NEP (with permission from Warwicks CC)	N – time / resource constraints to integrate into Bucks LNRS pilot for SCP process			
39	Heritage at risk register	Searchable interactive map which provides information on the principle vulnerability of each site, although advice will still be needed from Historic England	Historic England	N - Time / resource constraints within SCP process			

In future – any review of the pilot LNRS / future LNRSs will in addition need to consider a map of biodiversity net gain offset sites.

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